

APPENDIX G
RESPONSE TO COMMENTS

APPENDIX G RESPONSES TO COMMENTS

G.1 Common Responses to Comments

Table G-1: Key to Common Comment Responses

Common Response Number	Commenter	Comment Number
1	Liz and Steve Robbins	4-1
	Judith Greer Essex	10-1
	Anne Butterfield	25-1
	Megan Murphy	36-3
	Shaun Gonzales	52-7
	Basin and Range Watch	55-1
	Californians for Renewable Energy (CARE) and La Cuna de Aztlan	58-1, 58-3
	Western Watershed Project	59-1, 59-3
	Defenders of Wildlife, <i>et al.</i>	63-5, 63-6, 63-7
	LiUNA Local 783	66-47
	Jennifer Jones	72-5, 72-6
2	Elena Ray	1-1
	Jane Huff	2-1
	Tom Blumenfeld	3-1
	Anna Scotti	5-1
	Sherri Gallant	7-1
	Julie Barrett	8-1
	Colin Smith	9-1
	Juliet Lamont	11-1
	Linda Hoffpauir	12-1
	Katherine Jenkins	13-1
	Peg Hardman	15-1
	Amy Jemc	17-1
	Maurice Carriere	18-1
	Cristy Wojdac	19-1

	Chris Howell	21-1, 21-5
	Jenny Wilder	23-1
	Diana Cao	24-1
	Wayne Johnson	26-1
	Aida Shirley	27-1
	Evelyn Gajowski	32-1
	Fred Rinne	34-1
	Meagan Papp	39-5
	Stephanie Murray	35-1
	Deborah Balderaz	38-1
	Kermit Wegner	40-1
	Patricia Cook	41-1
	Jeanette Shin	42-1
	Michelle Ray	44-1
	Judith Greer Essex	47-1, 47-5
	Jennifer Jones	72-1, 72-4
3	Elena Ray	1-1
	Jane Huff	2-2
	Tom Blumenfeld	3-2
	Liz and Steve Robbins	4-2
	Sherri Gallant	7-2, 7-3
	Julie Barrett	8-2
	Colin Smith	9-2
	Juliet Lamont	11-2
	Linda Hoffpauir	12-2
	Karla Walker	16-1
	Cristy Wojdac	19-2
	Mimi Chen	20-1
	Chris Howell	21-2
	Ken Wilson	22-1
	Jenny Wilder	23-3
	Diana Cao	24-2
	Dave Kwinter	29-1

	Juanita Colucci	30-2
	Nat Ladik	31-1
	Fred Rinne	34-1
	Stephanie Murray	35-2
	Deborah Balderaz	38-2
	Meagan Papp	39-2
	Kermit Wegner	40-2
	Michelle Ray	44-2
	Ann Giordano	45-1
	Judith Greer Essex	47-2
	Shaun Gonzales	52-4
	Western Watersheds Project	59-9
4	Elena Ray	1-2
	Jane Huff	2-3
	Tom Blumenfeld	3-3
	Liz and Steve Robbins	4-3
	Mary Elizabeth Raines	6-1
	Sherri Gallant	7-4
	Julie Barrett	8-3
	Colin Smith	9-3
	Juliet Lamont	11-3
	Linda Hoffpauir	12-3
	Katherine Jenkins	13-1
	cyndiric	14-1
	Peg Hardman	15-2, 15-5
	Karla Walker	16-2, 16-3
	Amy Jemc	17-1
	Cristy Wojdac	19-3
	Mimi Chen	20-2
	Chris Howell	21-3
	Ken Wilson	22-2
	Jenny Wilder	23-2
	Diana Cao	24-3

	John St. Clair	28-1
	Dave Kwinter	29-2
	Juanita Colucci	30-1
	Nat Ladik	31-2
	Evelyn Gajowski	32-2
	Fred Rinne	34-2
	Stephanie Murray	35-3
	Megan Murphy	36-3
	Deborah Balderaz	38-3
	Meagan Papp	39-3
	Kermit Wegner	40-3
	Nicole Miller	43-2, 43-3
	Michelle Ray	44-3
	Ann Giordano	45-2
	Margie Rick	46-1
	Judith Greer Essex	47-3
	Jennifer Jones	72-2
5	Elena Ray	1-3
	Jane Huff	2-4
	Tom Blumenfeld	3-4
	Liz and Steve Robbins	4-4
	Sherri Gallant	7-5
	Julie Barrett	8-4
	Colin Smith	9-4
	Juliet Lamont	11-4
	Linda Hoffpauir	12-4
	Peg Hardman	15-3
	Karla Walker	16-4
	Cristy Wojdac	19-4
	Mimi Chen	20-3
	Chris Howell	21-4
	Ken Wilson	22-3
	Dave Kwinter	29-3

	Nat Ladik	31-3
	Evelyn Gajowski	32-3
	Deborah Balderaz	38-4
	Meagan Papp	39-4
	Kermit Wegner	40-4
	Nicole Miller	43-1
	Michelle Ray	44-4
	Ann Giordano	45-3
	Margie Rick	46-2
	Judith Greer Essex	47-4
	Jennifer Jones	72-3
6	Elena Ray	1-4
	Jane Huff	2-5
	Tom Blumenfeld	3-5
	Liz and Steve Robbins	4-5
	Sherri Gallant	7-6
	Julie Barrett	8-5
	Colin Smith	9-5
	Juliet Lamont	11-5
	Linda Hoffpauir	12-5
	cyndiric	14-1
	Peg Hardman	15-4
	Karla Walker	16-5
	Cristy Wojdac	19-5
	Mimi Chen	20-4
	Ken Wilson	22-4
	Jenny Wilder	23-4
	Dave Kwinter	29-4
	Nat Ladik	31-4
	Evelyn Gajowski	32-4
	Danielle Cannady	33-1
	Deborah Balderaz	38-5
	Kermit Wegner	40-5

	Michelle Ray	44-5
	Ann Giordano	45-4
	Margie Rick	46-3
	Marcie Reeter	48-2
	Shaun Gonzales	52-1
	Basin and Range Watch	55-17
	Audubon California <i>et al.</i>	64-1
7	Thom Armstrong	49-1
	Ginger Ontiveros	51-1
	Thurston Smith	54-1
	Susan Brodeur	68-1
	Paul Granillo	71-1

Common Response 1: Purpose and Need and Alternatives

Summary of Issues Raised

1. Concerns that the BLM's statement of Purpose and Need is too narrow.
2. Suggestions that alternative renewable energy generation technology, distributed generation, conservation and demand-side management, and siting alternatives should be considered.

Response

As explained in Section 6.2.1 of the BLM's NEPA Handbook, a carefully crafted purpose and need statement can "increase efficiencies by eliminating unnecessary analysis and reducing delays in the process." The statement of purpose and need dictates the range of alternatives, because action alternatives are not "reasonable" if they do not respond to the purpose and need for the action.

Purpose and Need

The BLM's purpose and need statement describes the problem or opportunity to which the BLM is responding and what the BLM hopes to accomplish by the action (BLM NEPA Handbook Section 6.2). As correctly noted in several comments, the narrower the purpose and need statement, the narrower the range of alternatives that must be analyzed; the converse also is true. BLM has considerable discretion in defining the purpose and need of the proposed action (40 CFR 1502.13). Multiple comments requested that the BLM substantially expand its statement to address more broad (and less specific) purposes in order to allow for consideration of a broader range of alternatives.

In accordance with FLPMA Section 103 (c), the BLM manages public lands for multiple use in a manner that takes into account the long-term needs of future generations for renewable and non-

renewable resources. The Secretary of the Interior is authorized to grant ROWs on public lands for systems of generation, transmission, and distribution of electric energy (Section 501 (a)(4)). In responding to a ROW grant application under this authority, the BLM may decide to deny or grant a requested ROW, or to grant the ROW with modifications. Modifications may include modifying the proposed use or changing the route or location of the proposed facilities (43 CFR 2805.10(a)(1)).

As directed by Secretarial Order 3285, the BLM has identified renewable energy projects on federally managed lands as a priority use of the lands it manages. As a result, the BLM is considering ROW grants for various renewable energy projects throughout California and other western states. Each of these projects is considered by the BLM on its own merits and with consideration of the impacts of the specific project on a specific site.

Consistent with FLPMA, the BLM relies on project proponents to identify renewable energy technologies and general project locations and configurations that are technically and economically viable given current market conditions, renewable portfolio standards, technological advancements, transmission access, and related considerations. Through pre-application and NEPA processes for such projects, the BLM works with applicants, stakeholders, and other federal land and resource management agencies to refine proposals and help identify possible alternate locations that conform with applicable federal laws, regulations, policies, and land use plans.

BLM's purpose and need, as stated in Section 1.1.1 of the PA/FEIS/FEIR, is based on two key considerations: (i) the potential action the BLM could or would take on the specific proposed action; and (ii) the response of the BLM in meeting specific directives regarding the implementation of renewable energy projects on federally-managed lands. The primary action that BLM is considering is a response to a specific ROW grant application from the Applicant to construct and operate a specific solar technology on a specific site managed by the BLM. As a result, the BLM determined that a key purpose of this project is to determine whether to approve, approve with conditions, or deny that ROW application for the Stateline Solar Farm (Alternative 1). The BLM also considered alternatives that would involve project configurations designed to reduce impacts to resources (Alternatives 2 and 3), an alternative which would result in a reduced power output (Alternative 4), and three no action/no project alternatives.

The BLM acknowledges that the Applicant has specific objectives and constraints for the project; these are set forth in the Applicant's POD. While the agency has reviewed and is aware of the Applicant's objectives and constraints, it has not relied upon them to define the statement of its own (public) purpose and need, which is provided in PA/FEIS/FEIR Section 1.1.1. In support of this point, a few of the alternatives carried forward for detailed consideration would not accomplish the Applicant's project objectives. For example, Alternative 4, Reduced Acreage Alternative, which would have a 232 MW capacity; by comparison, section 1.5 of the POD states that the additional project objectives include establishing 300 MW of generating capacity.

The BLM believes that the purpose and need for the Stateline Solar Farm, as discussed in PA/FEIS/FEIR Chapter 1, is reasonable, consistent with governing directives and the requirements of Title V of FLPMA, and satisfies the requirements of NEPA. Therefore, the purpose and need for this project was not revised in response to these comments.

Alternatives

Brownfields / Degraded Lands Alternative. Multiple comments on the Draft PA/EIS suggested that the BLM should site utility-scale renewable energy projects on potentially contaminated “brownfield” lands, lands where the effects on sensitive resources would be reduced, or lands that have been previously disturbed or developed. Additional information on potential brownfield sites is added in Chapter 2.8 of the PA/FEIS/FEIR.

Distributed Generation. Multiple comments on the Draft PA/EIS suggested that the BLM should evaluate the distributed generation of solar energy resources as opposed to centralized, large-scale proposals like the Stateline Solar Farm. This alternative was discussed in Section 2.8.3 of the Draft PA/EIS. While the BLM recognizes the importance of distributed generation, reports show that a combination of distributed generation, utility-scale solar projects and other efforts will be needed to meet established goals for renewable energy development in California. See, for example, the California Energy Commission’s December 2011 report entitled *Renewable Power in California: Status and Issues*, which reports that approximately 3,000 MW of distributed generation capacity was installed as of 2011 and, if existing state programs to support distributed generation are fully successful, California could add 6,000 MW of additional capacity in the next 5 to 8 years, “leaving a gap of roughly 3,000 MW that may require additional programs or incentives” (CEC 2011).

The California Public Utilities Commission (“CPUC”) has similarly identified 21 challenges to developing a high penetration of distributed generation in California. Among these challenges is “the potentially time consuming and costly process of going through the interconnection process,” which little effort is being made to resolve. The deadline for meeting the 33% RPS is less than seven years away and a distributive generation alternative cannot be implemented within a reasonable period of time to achieve this key project objective.

Further, the applicable federal orders and mandates providing the drivers for the BLM’s consideration of the proposed ROW application and related CDCA Plan amendment compel the BLM to evaluate utility-scale solar energy development. As discussed in PA/FEIS/FEIR Section 1.1.1, Secretarial Order 3285A1 requires the BLM to undertake multiple actions to facilitate large-scale solar energy production. Accordingly, the BLM’s purpose and need for agency action in this PA/FEIS/FEIR is focused on the siting and management of the proposed utility-scale solar energy development within the requested ROW (see PA/FEIS/FEIR Section 1.1.1).

As at least one court has recognized, the suggestion that distributed generation is a feasible alternative to utility scale development a policy fight that project opponents, “lost when state and federal executives and legislatures enunciated goals and adopted measures relating to renewable energy in support of [utility scale solar projects.]” *W. Watersheds Project v. Salazar*, No. 2:11-cv-00492-DMG-E, slip op. at 39 (C.D. Cal. Aug. 10, 2011).

Conservation and Demand Side Management. Multiple comments on the Draft PA/EIS suggested that the BLM should evaluate conservation and demand side management as an alternative to the project. As described in PA/FEIS/FEIR Table 2-9, the BLM considered conservation and demand side management as an alternative to the proposed project, but eliminated it from detailed analysis similar to a distributed generation alternative because it would not meet the BLM’s purpose and need and because it alone is not sufficient to address all

of California's energy needs in light of population growth and increasing energy demands (PA/FEIS/FEIR Table 2-9).

Non-federal Land Alternatives. As discussed in PA/FEIS/FEIR Section 2.8.1.1, an all-private land alternative was investigated; however, it was not carried forward for detailed evaluation because no private parcels or combinations of parcels of sufficient size were available that met the Applicant's minimum project requirements.

Common Response 2: Objection to additional industrial development in Ivanpah Valley, and on land that is currently undeveloped

Summary of Issues Raised

1. The comments cite the presence of desert tortoise habitat, and request that a less destructive location be considered for the project. The comments propose private lands, previously developed lands, and rooftops as alternative locations to be considered.

Response

The PA/FEIS/FEIR acknowledges that the project is proposed in desert tortoise habitat, and discusses the quality and existing protections of that habitat in relation to other surrounding areas. The comments fail to acknowledge the factors that were considered by the applicant in siting their project, as discussed in Section 2.8.1 of the DEIS/DEIR. Those factors included technical requirements, including the need for a large area of contiguous land for a facility, as well as resource protection requirements, such as avoidance of Areas of Critical Environmental Concern (ACECs), Desert Wildlife Management Areas (DWMAs), and critical habitat. In addition, as discussed in Common Response Number 1, other sites, including already-disturbed lands, private lands, and rooftops were considered by both the applicant and BLM, and were found to not meet the technical and feasibility requirements for the project.

Common Response 3: Request a conservation alternative that amends land use plans

Summary of Issues Raised

1. The comments request that BLM evaluate a conservation alternative that amends land use plans to protect remaining desert habitat in Ivanpah Valley from industrial development, consistent with a 2011 USFWS recommendation.

Response

Although the source of the USFWS recommendation is not stated in the comment letters, it is assumed that they are referring to the 2011 Ivanpah SEGS Biological Opinion (BO). In Recommendation Number 2 on Page 92 of that BO, USFWS recommended that the Bureau amend land use plans to prohibit large-scale solar development within all remaining portions of Ivanpah Valley to reduce fragmentation within the critical linkage between the Ivanpah

Critical Habitat Unit (CHU) and the Eldorado CHU.

As shown in Figure 10 of the USFWS 2011 Revised Recovery Plan for the Mojave Desert Tortoise, the Piute-Eldorado CHU is located to the east of the Ivanpah CHU. The proposed project, on the other hand, is located to the west of the Ivanpah CHU, and is largely isolated from the Piute-Eldorado CHU by Interstate 15, the Large-Scale Translocation Site (LSTS), the casino developments at Primm, Ivanpah Dry Lake, and several mountain ranges. As discussed in the Regional Study (NatureServe 2012), the only potential interconnections between the project site and outside areas are to the east, under Interstate 15 into the Ivanpah CHU, and to the northwest through Stateline Pass. Neither of these connections leads anywhere close to the Piute-Eldorado CHU. Therefore, solar development at the project site has no potential to interfere with any linkages between the Ivanpah CHU and the Piute-Eldorado CHU. As a result, the proposed action does not conflict with the objective of the USFWS recommendation in the 2011 Ivanpah SEGS BO. The proposed action follows the recommendations expressed in the 2011 Ivanpah SEGS BO by siting the proposed action near Ivanpah Dry Lake where tortoise densities are low. The map showing the configuration of CHUs, with respect to proposed project boundaries, has been added to the PA/FEIS/FEIR as Figure 3.22-3.

The proposed action considered by BLM has been substantially modified and supplemented, from the original project proposal in 2008, in order to improve local connectivity immediately surrounding the proposed action.. BLM has worked with the applicant to maximize tortoise connectivity surrounding the Proposed Action, including to Stateline Pass to the extent feasible.

Finally, although the proposed action under consideration by BLM does not include a land use plan to prohibit solar development throughout Ivanpah Valley, it does include expansion of the Ivanpah DWMA boundary by more than 23,000 acres, and would effectively prohibited any further solar development.

Common Response 4: Request project be sited on already-disturbed lands

Summary of Issues Raised

1. The comments request that the Stateline and Silver State proposals be rejected, and that BLM ask First Solar to build the projects on already-disturbed land.

Response

As discussed in Common Response Number 1, other sites, including already-disturbed lands and private lands, were considered by both the applicant and BLM, and were found to not meet the technical and feasibility requirements for the project.

Common Response 5: Evaluation of desert tortoise habitat linkage

Summary of Issues Raised

1. The comments state that the EISs for the Stateline and Silver State projects do not properly evaluate the extent to which the projects would obstruct important desert tortoise habitat linkage.

Response

The impact of the proposed project and alternatives on connectivity, including the cumulative impact associated with Silver State and other projects, was disclosed in the DEIS/DEIR, and will be considered by BLM in the decision for both the proposed ROW and for the proposed DWMA expansion. The DEIS/DEIR identified and analyzed alternative site configurations, which were specifically developed to minimize impacts to connectivity corridors. Section 2.3.3 of the DEIS/DEIR discusses how Alternative 3 was developed by BLM specifically to increase the area available for connectivity between the facility, Metamorphic Hill, and Clark Mountains. Section 4.22.4.1 of the DEIS/DEIR discusses how the configuration of Alternative 2 would increase the area available for connectivity between the northern boundary of the facility and the Clark Mountains. Cumulative loss of desert tortoise habitat, individuals, and connectivity, including the contribution of the Silver State project, were all analyzed within Section 4.22.10.4 of the PA/FEIS/FEIR. The connection of functional habitat was considered by both the Applicant and BLM in conducting the Regional Assessment (NatureServe 2012), and by BLM in analyzing the impact of the proposed action and alternatives on the tortoise connectivity.

Regional connectivity within the lobe of Ivanpah Valley, where the proposed action is located, was limited under historical conditions even prior to anthropogenic impacts within the valley. The proposed action would not result in the severing of existing genetic or demographic linkages. The amount of habitat that would be located outside the proposed action is expected to support a persistent tortoise population due to the width of resulting linkages, existing tortoise densities and distribution, and contiguity of occupied habitat.

Common Response 6: Request delay of project approval until tortoise research is completed

Summary of Issues Raised

1. The comments request that the EISs for both the Stateline and Silver State projects be revised and re-issued after current tortoise research in Ivanpah Valley is completed in mid-2013.

Response

It is not clear where the commenters obtained information that tortoise research in Ivanpah Valley would be completed in 2013. Connectivity studies in Stateline Pass are ongoing, and no end date has been reported. In the Biological Opinion for Ivanpah SEGS, monitoring of translocated tortoises is required throughout the life of the facility. It is likely that tortoise research in the area will continue for years to come, most of it only made possible because it is funded by solar projects. Placing proposed projects in indefinite suspension is not a feasible approach.

Common Response 7: General project support

Summary of Issues Raised

1. The comments generally support approval of the project, citing the jobs it would create, and the contribution of the project to reducing reliance on fossil-fuel energy sources.

Response

The comments in support of the project are noted, and will be considered by the agency in its ultimate decision.

G.2 INDIVIDUAL RESPONSES TO COMMENTS

In this section, responses are provided for each comment received. All comment letters, coded to delineate individual comments as described above, are provided in Appendix F.

Letter 14 – Response to Comments from cyndiric@netscape.net

- 14-1. Please see Response to Common Comment Number 4 regarding the request to site the project on already disturbed land.

The width of tortoise connectivity areas was analyzed in detail in the Regional Assessment Report (NatureServe 2012), and the results were evaluated in the DEIS/DEIR Section 4.22.3.1. The width of the corridors will continue to be evaluated by the U.S. Fish and Wildlife Service (USFWS) in the Biological Opinion before a final project decision is made.

Please see Response to Common Comment Number 6 with respect to the request to delay project approval until mid-2013.

Letter 25 – Response to Comments from Anne Butterfield

- 25-1. Please see the Response to Common Comment Number 1, with respect to consideration of the solar project in urban areas. Please note that the comment is incorrect in referring to the project site as a wilderness area. It is correct that the site is desert tortoise habitat, but the site is not designated as a wilderness, Area of Critical Environmental Concern, Desert Wildlife Management Area, Critical Habitat, or any other of a number of possible protective designations.
- 25-2. The Bureau has no jurisdiction to direct First Solar to construct a solar farm on Lake Mead. The technical information in the comment is available to First Solar, and they may choose to work with other agencies to consider alternative siting methods.
- 25-3. See Response to Common Comment Number 1.

Letter 34 – Response to Comments from Fred Rinne

- 34-1. Please see Response to Common Comment Number 2 with respect to the comment on industrialization of Ivanpah Valley. Please see Response to Common Comment Number 3 with respect to the USFWS recommendations.
- 34-2. Please see Response to Common Comment Number 4. Please note that the comment is incorrect in referring to the project site as undisturbed wilderness.

Letter 36 – Response to Comments from Megan Murphy

- 36-1. Section 4.19.3.1 evaluated the availability of water to support construction of the project, and concluded that sufficient water exists. The relative scarcity of water in this area is long-standing, due to topographic features, and the area has been desert since long before man-made global warming began. Although global warming may lead to future droughts, the timeframe of almost all of the water use for the project is only for the 2 to 4 year construction period, and it is unlikely that water availability would be reduced by global warming within that very short timeframe.
- 36-2. The impacts to the desert tortoise that are discussed in the comment were identified in the analysis, disclosed in the DEIS/DEIR, and mitigation measures were developed to avoid or reduce the impacts. That analysis included impacts due to human handling, habitat loss and fragmentation, increase in predation, and risks associated with translocation. The comment's reference to how shade from solar panels would affect tortoise forage is incorrect. Although vegetation will be left in place under the applicant's revised POD, and shading may affect this vegetation, the vegetation would not be available as forage for tortoises. The proposed action is to remove tortoises outside of the fenced area, and tortoises would therefore not have access to vegetation within the project site.
- 36-3. Please see response to Common Comment Number 1 and Number 4.
- 36-4. The commenter's preference for selection of Alternative 6, which would designate the site as unsuitable for solar development, is noted.

Letter 37 – Response to Comments from Elizabeth Hedrick

- 37-1. The comment in favor of selection of Alternative 3 is noted. The discussion of both beneficial and adverse impacts of the alternative are consistent with those discussed in the DEIS/DEIR.

Letter 39 – Response to Comments from Meagan Papp

- 39-1. Multiple use of public lands, including allowing leasing of public lands for development consistent with BLM's multiple use mandate and requirement for sustainable development, is required of BLM under the Federal Land Policy and Management Act (FLPMA).
- 39-2. Please see Response to Common Comment Number 3.
- 39-3. Please see Response to Common Comment Number 4.

- 39-4. Please see Response to Common Comment Number 5.
- 39-5. Please see Response to Common Comment Number 2.

Letter 48 – Response to Comments from Marcie Reeter

- 48-1. The comment on the importance of the species present at the site is noted.
- 48-2. Please see Response to Common Comment Number 6.

Letter 50 – Response to Comments from John Coffey

- 50-1. The information regarding the Executive Order on Improving Performance of Federal Permitting and Review of Infrastructure Projects is appreciated. The Department of the Interior is a member of the Steering Committee established by the order, and the order and decisions of the Steering Committee are integrated into the agency's permitting process.

Letter 52 – Response to Comments from Shaun Gonzales

- 52-1. Please see Response to Common Comment Number 6.
- 52-2. The conduct of a conservation plan, as recommended in the comment, is outside of the scope of the agency's legal responsibility to evaluate the First Solar Stateline application. The California Desert Renewable Energy Conservation Plan (DRECP), which is being conducted concurrently with BLM's review of pending solar applications, is considering additional conservation options for this and other areas.
- 52-3. It is not clear what other purpose and need statements are referred to in the comment. Our review indicates that other environment review documents in Ivanpah Valley similarly focused on evaluation of a pending application, as is mandated by BLM's NEPA Handbook.
- 52-4. Please see response to Common Comment Number 3. The proposed action has no ability to impact connectivity between the Ivanpah and Eldorado CHUs, both of which are located to the east of the proposed project area.
- 52-5. The objection to the exclusion of pending applications from the solar exclusion zones in the Solar Programmatic EIS is noted.
- 52-6. The commenter's preference for Alternative 6 is noted.
- 52-7. Please see Response to Common Comment Number 1.
- 52-8. Mining claims are common on BLM land, and rarely lead to actual mineral development. BLM considers a potential mining project to be reasonably foreseeable when an application is received, accompanied by a Plan of Operations. No such application or Plan of Operations has been received for the project mentioned in the comment.

Based on a review of information about the wind project on the internet, the location of the wind project appears too distant to have a reasonable chance to have overlapping

effects with the proposed Stateline project.

- 52-9. The number of tortoises previously translocated from Ivanpah SEGS that may be present is discussed in the DEIS/DEIR Section 3.22.1, on Page 3.22-10. Translocated tortoises associated with the proposed action have the potential to be present within the Desert Xpress project footprint. These tortoises will be relocated out of harm's way during the Desert Xpress project, but they will not be subjected to translocation.

Letter 53 – Response to Comments from Jared Fuller

- 53-1. The impacts to tortoise, including cumulative impacts associated with Ivanpah SEGS and other projects, were addressed in Section 4.22 of the DEIS/DEIR. The impacts to special status plants, again with cumulative analyses including the Ivanpah SEGS and other projects, were evaluated in Section 4.17.
- 53-2. The comment regarding additional modification of the northern boundary of the project area to avoid rare plants in that area is noted, and will be considered by BLM in the final project decision. The northern boundary of Alternative 3 has been adjusted to the south, subsequently reducing impacts to special status plant species.

Letter 55 – Responses to Comments from Basin and Range Watch

- 55-1. As stated on page 1-4 of the DEIS/DEIR, the BLM's purpose and need for the Stateline Solar Farm project is to respond to the Applicant's application for a ROW grant to construct, operate, maintain, and decommission a solar facility on public lands *in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws*, including NEPA and the Endangered Species Act. Compliance with these regulations requires the consideration and feasible mitigation of potential impacts to biological, hydrological, cultural, visual, and recreational resources, as well as other areas of environmental concern. See also Common Response Number 1.

As of October 12, 2012, the Department of the Interior has authorized over 10,000 MW of renewable power projects on public lands. As described on page 1-2, Section 211 of the Energy Policy Act of 2005 directs the Secretary of the Interior to authorize *at least* 10,000 MW of renewable power projects by 2015. Accordingly, the department may continue to approve renewable power projects on the public lands even after reaching this goal. Consideration of the proposed renewable energy project on public lands is consistent with this direction. See also Common Response Number 1.

- 55-2. Appendix D of the PA/FEIS/FEIR presents the evaluation of the relevance and importance of the resources, including rare plants, Gila monsters, and Bighorn sheep, in accordance with BLM Manual 1613.

The comment that the BLM's consideration of the ACEC is appreciated, and that the commenter believes that the ACEC is the best alternative for the desert tortoise, is noted.

- 55-3. The description of the modification of the DWMA boundary in Section 2.2.2, and the description of Alternative 6 in Section 2.5.1, have been revised to clarify that Alternative 6 would include inclusion of the entire Project Study Area within the boundaries of the

modified DWMA. By making this clarification, Alternative 6 effectively considered designation of the entire remainder of the area west of Interstate 15 as being included within the Ivanpah DWMA.

- 55-4. This suggestion has been considered, and relevant analysis provided, in PA/FEIS/FEIR Section 2.8.1.
- 55-5. As described in PA/FEIS/FEIR Table 2-9, the BLM considered distributed generation as an alternative to the proposed project, but eliminated it from detailed analysis because it would not meet the BLM's purpose and need to respond to an application for a utility-scale PV generation facility (PA/FEIS/FEIR Table 2-9). Further, while the BLM recognizes the importance of distributed generation, reports show that a combination of distributed generation, utility-scale solar projects and other efforts will be needed to meet established goals for renewable energy development in California. See, for example, the California Energy Commission's December 2011 report entitled *Renewable Power in California: Status and Issues*, which reports that approximately 3,000 MW of distributed generation capacity installed as of 2011 and, if existing state programs to support distributed generation are fully successful, California could add 6,000 MW of additional capacity in the next 5 to 8 years, "leaving a gap of roughly 3,000 MW that may require additional programs or incentives" (CEC, 2011).

Further, the applicable federal orders and mandates providing the drivers for the BLM's consideration of the proposed ROW application and related CDCA Plan Amendment compel the BLM to evaluate utility-scale solar energy development. As discussed in PA/FEIS/FEIR Section 1.1.1, Secretarial Order 3285A1 requires the BLM to undertake multiple actions to facilitate large-scale solar energy production. Accordingly, the BLM's purpose and need for agency action in this PA/FEIS/FEIR is focused on the siting and management of the proposed utility-scale solar energy development within the requested ROW.

- 55-6. The commenter expresses the opinion that other high profile renewable energy projects have fallen short of their mitigation requirements to control dust. Mitigation measures MM-Air-1 (for construction) and MM-Air-3 (for operations) require the applicant to minimize fugitive dust emissions due to wind erosion during both the construction and operation phases of the project. These include measures to pave or stabilize access and construction roads; limit vehicle speed on unpaved areas; cover soil storage piles and disturbed areas; and use of wind control erosion techniques, such as windbreaks, and application of water and/or chemical dust suppressants. Measure MM-Air-1 requires submittal of the Air Quality Construction Management Plan to the MDAQMD 60 days in advance of construction. BLM, County, and MDAQMD review of the plan will include consideration of the efficacy of dust control measures used on previous construction sites, including those cited in the comment.
- 55-7. The DEIS/DEIR addressed the prevalence and risk of Coccidioidomycosis (Valley Fever) in Sections 3.11.1.1 and 4.11.3.1.
- 55-8. It would not be practicable to limit construction activities to periods when wind speeds would be less than 10 miles per hour because wind speeds of this or greater happen with relative frequency. Similarly, it would not be practicable to limit construction hours

when temperatures exceed 100 degrees. The Applicant would be subject to enforcement action for air quality violations through the MDAQMD.

- 55-9. The Applicant's Air Quality Construction Management Plan specifies the proposed soil stabilizers to be applied to soil disturbed during Project construction, as required by MDAQMD Rule 403.2. The proposed stabilizers, which are not polymer-based, are listed in Table 2-1 of the DEIS/DEIR, and were discussed, where applicable, throughout the description of the Proposed Action in Section 2.1. Use of the stabilizers is required by mitigation measures MM-Air-1 and MM-Air-3. The Air Quality Construction Management Plan includes Material Safety Data Sheets (MSDS) describing the contents and hazards associated with the proposed stabilizers. In the evaluation of risks from the stabilizers, BLM noted that one of the MSDS sheets was incomplete, and that the product could not be used until a complete MSDS was provided (see MM-PH&S-2). The potential threats of the proposed stabilizers to water quality were evaluated in Section 4.19.3.1.
- 55-10. The comment provides information on flooding events that occurred at three other sites. While the comment is correct in stating that the proposed project site is an active alluvial drainage that is subject to stormwater flooding, the comparison of the proposed project to the damage that occurred at other sites is not applicable. The Stateline project employs several methods to reduce the potential for stormwater damage. First, as described in Section 2.1.3.1 of the DEIS/DEIR, the project site selection and layout was designed to take advantage of a bifurcation of the stormwater flow system downstream of the topographic features called Metamorphic Hill. Metamorphic Hill forces stormwater flow into two concentrated channels on its north and south sides, and the proposed project is sited substantially in the area between the two channels. In addition, the Applicant proposes to manage stormwater by using detention basins to slow stormwater flow and then release it at a slower velocity across the site. BLM worked with the Applicant in advance of their application to establish the level of analysis needed to support the design of the system, and this analysis was evaluated in detail in Section 4.19.3.1.
- 55-11. The project site is located very close to highly populated areas. The site is located within two miles of a major tourist attraction at Primm, and within about 30 miles of metropolitan Las Vegas. While it is correct that law enforcement problems occur in these areas, the increase in the number of people in the local area would not be expected to cause a significant increase in these issues.
- 55-12. The DEIS/DEIR included an independent literature search for all existing information on environmental effects and risks of CdTe panels. These studies were discussed in Sections 4.11.3.1 and 4.21.3.1. The DEIS/DEIR does not claim that the panels are risk free, and acknowledges that they do not provide a site-specific, long-term analysis of the potential for leaching of cadmium in a desert environment. However, the comprehensive evaluation of the literature identified numerous studies in which cadmium releases were low or non-existent, and identified no studies in which there was any potential for a release. The comment does not provide any additional information that would suggest that the analysis is incomplete, or its results incorrect. The breakage rate is not applicable, because the studies show that breakage does not increase the risk of leaching of cadmium.

55-13. The analysis of the entire construction process, including commuting of workers, as presented in Section 4.3.3.1, shows that carbon emissions are minimal. Carbon emissions associated with trade-out of failed modules, even if it was 100% of modules, would be a fraction of the original construction emissions.

55-14. The comment provides information on the presence and importance of rare plant species in the project area which is already disclosed and considered in the analysis in Section 4.17.3.1.

55-15. The comment provides general occurrence and acreage information on desert tortoise in Ivanpah Valley which is already disclosed and considered in the analysis in Section 4.22.3.1. The estimates of the number of tortoises potentially present on the proposed project site is a fraction of the numbers cited for the Ivanpah SEGS site in the comment.

The comment regarding the USFWS 1994 Desert Tortoise Recovery Plan, suggesting that that document identified the Ivanpah population as the most genetically unique population in the Mojave Desert, and Northeastern Mojave tortoises as the most genetically distinct in California, is unclear. These statements regarding the uniqueness and distinctiveness of the populations are not made in the 1994 Recovery Plan, or in the 2011 Revised Recovery Plan. The 2011 Revised Recovery Plan discusses the results of Hagerty and Tracy (2010), and other authors, in determining whether these results are appropriate to use in delineating revised recovery units. The Plan concludes that, due to generally continuous variation in genetic structure across the range, the delineation of recovery units using geographic discontinuities and barriers is appropriate. While BLM is aware of the ongoing research and literature regarding genetic variation within the species, these have not affected the manner in which the USFWS manages the species.

55-16. As discussed in Section 4.22.3.1, BLM considered the configuration of the project site and its effect on connectivity in the evaluation of both the solar project ROW, and the expansion of the boundaries of the Ivanpah DWMA.

55-17. BLM appreciates that the commenter's observations on the usefulness of the study programs funded by the Applicant. These programs are not presented as mitigation in the PA/FEIS/FEIR, but numerous other measures are proposed as mitigation, which are not discussed in the comment.

With respect to the comment requesting delay of project approvals to collect additional data, please see response to Common Comment Number 6.

The impact of the proposed project and alternatives on connectivity, including the cumulative impact associated with Silver State and other projects, was disclosed in the DEIS/DEIR, and will be considered by BLM in the decision for both the proposed ROW and for the proposed DWMA expansion.

The number of tortoises and quality of the habitat were disclosed in the DEIS/DEIR, and will be considered by BLM in the decision for both the proposed ROW and for the proposed DWMA expansion.

55-18. As described in Section 2.1 of the Desert Tortoise Translocation Plan, the plan was developed using the USFWS Plan Development Guidance of 2011. The subsequent analysis included tortoise density surveys and comparative habitat assessments to

determine the number of tortoises that could be introduced without exceeding the maximum density limit in the 2011 USFWS guidelines. That analysis included the presence of the tortoises translocated from Ivanpah SEGS. The results of that analysis were reported on Page 3.22-10 of the DEIS/DEIR, and concluded that, even with the Ivanpah SEGS tortoises, the site could still support the addition of 35 tortoises.

Section 4.23.3.1 cited the Desert Tortoise Recovery Office (DRTO) Science Advisory Committee in discussing the risks associated with translocation. Although the comment provides additional information on the translocation risks from CDFG and USFWS, the comment does not provide a citation to referenceable documents that could be used to add further information into the PA/FEIS/FEIR.

The potential spread of upper respiratory tract disease as a risk in translocation was listed as a potential impact in the analysis in Section 4.23.3.1. The Translocation Plan discussed how disease prevalence was a criterion in selection of recipient sites, and specified procedures to protect against spread of disease, as mandated by the USFWS *Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance*.

The connectivity corridor between the Silver State project and the Lucy Gray Mountains is not relevant to the evaluation of the Stateline project. The referenced USFWS letter requests that BLM and the applicant identify and commit to specific mitigation actions and monitoring studies, which is being done for the Stateline project.

- 55-19. Focused wildlife surveys of the Project area led by a qualified herpetologist failed to detect banded Gila monster. The DEIS/DEIR discusses that habitat may be present on Clark Mountain or Metamorphic Hill, but the project site itself is unlikely to support habitat. Mitigation measure MM-Wild-3 (employee training) and pre-construction surveys for desert tortoise would ensure that, if any gila monsters are present, they would be identified and handled appropriately.
- 55-20. This effect could occur, similar to known bird collisions with the mirrored sides of buildings. However, there is no evidence in the literature, or through operation of other PV facilities, that this potential effect has been identified. The theories put forth by Gabord Horvath, which speculate that birds might be lured to solar panels as a consequence of confused polarotatic aquatic insects laying eggs on the surface of solar panels has little relevance to the Stateline Solar Project because one of the underlying conditions of the theory—adjacency to natural water bodies—is not present at the solar farm site. Furthermore, given the fact that the panels are tilted, and not presenting a vertical mirrored surface, it is expected that the potential for fatal collisions with PV panels would be insignificant compared to the potential associated with vertical surface such as the mirrored sides of buildings.

The potential for birds and bats to be killed by collisions with the new transmission system was discussed in Section 4.23.3.1 of the DEIS/DEIR. One advantage of siting solar power plants, such as Stateline, in and near existing utility corridors is to reduce the length of new transmission and thus reduce associated impacts.

The potential for take of golden eagles was discussed in the DEIS/DEIR in Section 4.23.3.1.

Management of the temporary water storage ponds, including coverage by netting, was addressed in mitigation measure MM-Wild-13.

- 55-21. The analysis of impacts to the bighorn sheep in Section 4.23.3.1 of the DEIS/DEIR included disclosure that the project could narrow the width of the movement corridor between Clark Mountain and Stateline Hills.
- 55-22. Based on this and other similar comments, information on the desert kit fox has been added to Sections 3.22.1 and 4.22.3.1 of the PA/FEIS/FEIR.
- 55-23. The American badger does not meet the definition of a Special Status Species, as defined in Section 3.22.1 of the DEIS/DEIR. Therefore, no mitigation or monitoring is required.
- 55-24. The information on the cultural resources within the Ivanpah Valley area was included in Section 3.4 of the DEIS/DEIR. Section 4.4.3.1 concurred with the comments by concluding that expansion of the boundary of the Ivanpah DWMA would provide a beneficial impact by reducing the potential for disturbance of existing resources.
- 55-25. The visibility of the site from conservation areas was disclosed, and the degradation of the visual experience was acknowledged, in Section 4.18.3.1.

The analysis of the visual appearance of the project included a discussion of the time of day and light angles. The analysis presents the worst-case scenario.

The comment is unclear in referring to debating “lower Visual Class designations” due to removal of habitat, and in referring to lands of “all VRM Classifications”. The visual class designation is based on the 2010 inventory, and the analysis is conducted to determine whether the project conforms to that designation. The analysis included consideration of all of the individual factors that are used in determining the visual class. While the comment makes general statements about the visibility and appearance of the project, it does not specifically address the document’s factor-by-factor analysis of the components that make up the classification, and therefore does not suggest that the conclusion regarding conformance with the classification is in error.

The definition of the objective of the class given in the comment is the definition of Class I. As discussed in Section 3.18.1.3, all of the BLM land from which the project would be visible is classified as VRI Class III. The factors listed to be considered were all discussed within Section 4.18.3.1.

The simulations do present the reflections from the panels, as seen in the simulations for KOP-10 and KOP-12. The main difference between the photo of Copper Mountain, provided in the comment, and the Stateline project is the distance and angle of view of the KOPs involved. Based on the photo in the comment, it appears that the Copper Mountain facility is much closer to an elevated KOP than is Stateline. That results in the simulation being from a higher angle, and also being from a closer location, than the KOP simulations for Stateline. As a result, the facility fills a larger portion of the field of view, making the reflections appear to be more prominent. In the case of Stateline, the appropriate KOPs, based on potential locations of sensitive viewers, are both farther away and at a lower relative elevation with respect to the facility. Therefore, the visual appearance of the facility, and any reflections, will be less prominent at Stateline than at Copper Mountain. This reduced visual impact is appropriately presented in the

simulations.

As discussed in Section 4.18.3.1, KOP-10 was situated at the Mojave National Preserve, and KOP-12 was situated at the Stateline Wilderness Area.

55-26. The comments in favor of a conservation alternative are noted.

Letter 56 – Responses to Comments from First Solar

- 56-1. The value provided in the DEIS/DEIR was from the Draft POD. The value provided in the comment, and included in the revised POD, has been incorporated into the PA/FEIS/FEIR.
- 56-2. The text has been modified to clarify that daily demand may exceed the value reported in the DEIS/DEIR (1.5 mgd), any exceedance would be provided out of storage, and the daily withdrawal would not exceed this value.
- 56-3. The additional information has been added to the text of the PA/FEIS/FEIR.
- 56-4. The definition of the APE provided in Section 4.4.2 has been included in Section 3.4.1. A description of the survey methods has been added in Section 3.4.1.2.
- 56-5. The list of tribes in the DEIS/DEIR is based on the list provided by NAHC. Additional tribes not recognized by the NAHC are not added to the text.
- 56-6. This correction has been made in the PA/FEIS/FEIR.
- 56-7. This correction has been made in the PA/FEIS/FEIR.
- 56-8. This issue is addressed by the definition of the APE as being the area which could sustain indirect, non-physical effects. Stating that no resources have been identified is problematic because it implies that surveys outside of the study area have occurred, and that is not accurate.
- 56-9. This correction has been made in the PA/FEIS/FEIR.
- 56-10. The allotment data from the new August 2012 lease has been added to Sections 3.7 and 4.7 of the PA/FEIS/FEIR.
- 56-11. This correction has been made in the PA/FEIS/FEIR.
- 56-12. The reference to the 2,624 foot elevation is not the shoreline, but the highest elevation of mapped lacustrine sediments. Since it is the sediments that are an issue, and not the shoreline, this value has not been changed. It is not unexpected that lacustrine sediments could be found at a higher elevation than the current shoreline. The lowest elevation in the project area has been corrected, as provided in the comment. This correction makes the project site at the same elevation as the mapped lacustrine sediments.
- 56-13. The text of the DEIS/DEIR discusses BLM policy. The text has been revised to include the additional information.
- 56-14. Additional text has been added to Section 3.12 to ensure that some of the areas listed in Section 3.15 are also included under Recreation. In addition, the section has been modified to ensure that the responsible agency is identified for each area. However, the

section has not been re-organized to match Section 3.15. Special Designations are a formal management designation, and the analysis is intended to address project conformance with their management objectives. Most recreational activities are not formally designated, and the analysis is more focused on actual project interference with the activities.

- 56-15. The additional information has been added to the PA/FEIS/FEIR.
- 56-16. The text in Section 3.15 has been revised to show that state designations do exist, but that they are not relevant to projects on federal land.
- 56-17. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-18. The requested clarification has been made in the PA/FEIS/FEIR.
- 56-19. The information in the comment was provided after the DEIS/DEIR had gone to publication. Now that the formal information has been received, the text has been revised accordingly.
- 56-20. The text has been revised accordingly.
- 56-21. It is agreed that Section 401 certification is not applicable. The FEIS has been revised accordingly.
- 56-22. The comment does not provide the rationale for stating that the sentence is inaccurate or not applicable. No text change has been made.
- 56-23. The clarification has been made in the PA/FEIS/FEIR.
- 56-24. The comment is noted, but the change has not been made. The discussion in Section 3.18 was not intended to define a formal baseline against which comparisons are made, but to describe the complications that arose in developing the simulations.
- 56-25. This change has not been made. Any Plan Amendment would be made through the ROD, and could potentially include a change in land use.
- 56-26. This correction has been made in the PA/FEIS/FEIR.
- 56-27. This correction has been made in the PA/FEIS/FEIR.
- 56-28. The comment is noted, and part of the change has been made. The additional information with respect to alternatives is accurate, but is intended to direct the development of alternatives. The purpose here is to discuss the actions needed to address impacts, not to develop alternatives. However, it is agreed that “identify feasible mitigation measures that could avoid or substantially lessen the project’s significant environmental impacts” is a more accurate statement than “require the applicant to conduct mitigation to reduce the impacts to less than significant levels”.
- 56-29. The requested revisions have been made in the PA/FEIS/FEIR.
- 56-30. The reference to MM-Cult-3 has been added to PA/FEIS/FEIR section 4.4.3.2, 4.4.4.2, 4.4.5.2, and 4.4.6.2.
- 56-31. This correction has been made in the PA/FEIS/FEIR.

- 56-32. The requested change has not been made. The NEPA document evaluates impacts to both eligible and non-eligible resources.
- 56-33. The requested change has not been made. The NEPA document evaluates impacts to both eligible and non-eligible resources.
- 56-34. The requested change has not been made. The NEPA document evaluates impacts to both eligible and non-eligible resources.
- 56-35. The requested change has not been made. The NEPA document evaluates impacts to both eligible and non-eligible resources. There can still be residual effects, even without mitigation.
- 56-36. Sensitive land uses was defined on Page 3.9-3. No change has been made to the PA/FEIS/FEIR.
- 56-37. This correction has been made in the PA/FEIS/FEIR.
- 56-38. See response to comment 56-37.
- 56-39. See response to comment 56-37.
- 56-40. See response to comment 56-37.
- 56-41. See response to comment 56-37.
- 56-42. See response to comment 56-37.
- 56-43. This clarification has been made in the PA/FEIS/FEIR.
- 56-44. The measure is directly linked in the text to the potential for seismic and geologic hazards, which has not been completed. The text of the mitigation measure has been revised to require it prior to construction. The specifications in the measure provide more detailed requirements than were proposed by the Applicant in their POD, and therefore are not simply a re-statement of the Applicant's proposed action.
- 56-45. This clarification has been made in the PA/FEIS/FEIR.
- 56-46. This clarification has been made in the PA/FEIS/FEIR.
- 56-47. This clarification has been made in the PA/FEIS/FEIR.
- 56-48. This clarification has been made in the PA/FEIS/FEIR.
- 56-49. This clarification has been made in the PA/FEIS/FEIR.
- 56-50. This clarification has been made in the PA/FEIS/FEIR.
- 56-51. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to "jurisdictional waters".
- 56-52. This clarification has been made in the PA/FEIS/FEIR.
- 56-53. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to "jurisdictional waters".
- 56-54. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to "jurisdictional waters".

- 56-55. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-56. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-57. This clarification has been made in the PA/FEIS/FEIR.
- 56-58. The Jurisdictional Delineation Tech Report that was the source of the calculations and all other information related to this issue has an LSA logo on the cover. The first line of the introduction reads “LSA Associates, Inc. (LSA) conducted a jurisdictional delineation (JD) of a 5,885.7-acre (ac) site (hereinafter referred to as the study area). . . “. Listing any other author in the citations and references would create confusion for readers trying to identify documents in the Administrative Record. First Solar may submit the information under different cover, or identify a different document in which the referenced information is available, and then the citation could be changed. However, as long as the source of the information is included under LSA cover, the citation and reference will not be changed.
- 56-59. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-60. This clarification has been made in the PA/FEIS/FEIR.
- 56-61. This clarification has been made in the PA/FEIS/FEIR.
- 56-62. This clarification has been made in the PA/FEIS/FEIR.
- 56-63. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-64. The reference to section 4.17.3.1 has been added in the PA/FEIS/FEIR.
- 56-65. The reference to section 4.17.3.1 has been added in the PA/FEIS/FEIR.
- 56-66. The reference to section 4.17.3.1 has been added in the PA/FEIS/FEIR.
- 56-67. This clarification has been made in the PA/FEIS/FEIR.
- 56-68. The reference to wetlands in the DEIS/DEIS has been changed throughout the PA/FEIS/FEIR to “jurisdictional waters”.
- 56-69. This clarification has been made in the PA/FEIS/FEIR.
- 56-70. Section 4.17.10.5 of the PA/FEIS/FEIR has been revised to correct the inaccurate comparison of cumulative acreage of jurisdictional drainages to the total acreage of alluvial fan habitat.
- 56-71. In proceeding with the visual impact analysis, BLM determined that criteria in addition to the specific requirements of BLM’s VRM policy and CEQA were appropriate to informing the impact analysis. BLM’s analysis is not limited by criteria defined in regulation or guidance.
- 56-72. The text of the third additional criterion has been clarified in the PA/FEIS/FEIR to change the general “as discussed in this section” to a more specific “as discussed in Section 4.18.11.4”, and to properly refer to the language used in Section 4.18.11.4.

- 56-73. The text of MM-VR-1 has been revised to clarify that revegetation is required for temporarily disturbed areas once their use has been completed. The suggestion to apply this measure to post project operation incorrectly infers the intention of the measure.
- 56-74. The suggested clarifications have been made in the PA/FEIS/FEIR.
- 56-75. The text in Section 4.18 referred to difficulties with desert revegetation several times to support the contention that impacts would be unavoidable, long-term, and adverse. No change has been made to this text.
- 56-76. The text of mitigation measure MM-Water-9 has been clarified in the PA/FEIS/FEIR.
- 56-77. The additional reference has been obtained, and its information has been incorporated into the analysis.
- 56-78. The text of the PA/FEIS/FEIR has been modified to correct the statement that population size would be reduced.
- 56-79. The suggested text regarding tortoise connectivity has been reviewed. The text is generic, and the comment does not explain whether there is a deficiency in the current text, which is site-specific. No change has been made to the text.
- 56-80. The text has been modified to more accurately reflect the text of the Regional Assessment.
- 56-81. The reference to connectivity between the Ivanpah and Piute-Eldorado CHUs has been removed, as has the reference to the Silver State South project. It is agreed that no connectivity exists to the east, and this area is not relevant to the proposed action.
- 56-82. The discussion regarding tortoises having 360 degree range of movement has been deleted.
- 56-83. The reference to the USFWS width of 1.2 miles has been removed from the PA/FEIS/FEIR. The Service will base its analysis of connectivity on a variety of factors, as discussed in Section 1.g of the USFWS 2012 Status of the Species Report.
- 56-84. The suggested clarifications have been made in the PA/FEIS/FEIR.
- 56-85. The suggested clarification has been made in the PA/FEIS/FEIR.
- 56-86. The text of mitigation measure MM-Veg-3 has been modified to reflect the fact that surveys have already been completed.
- 56-87. The suggested clarification has been made in the PA/FEIS/FEIR.
- 56-88. The text of the PA/FEIS/FEIR Section 4.22.11.3 has been modified to include the suitability of grazing retirement as an acceptable component for CDFW-required habitat compensation.
- 56-89. The definition of “active nest” specified by the commenter in their Bird and Bat Conservation Strategy was “supporting evidence of new material having been added during the season”. This definition has been added to the PA/FEIS/FEIR.
- 56-90. A section summarizing the unavoidable impacts has been added to the PA/FEIS/FEIR.
- 56-91. The suggested clarification has been made in the PA/FEIS/FEIR.

56-92. The corrections to Figure 4-1 have been made.

56-93. The figures have been re-developed to maintain the original information.

Letter 57 – Responses to Comments from XpressWest

57-1. The evaluation of potential conflicts with other rights-of-way in Section 4.6 of the PA/FEIS/FEIR has been revised to discuss the proximity of the Desert Xpress ROW grant to the proposed project acreage. Although the comment is correct that the Project Study Area included the referenced acreage, the proposed project footprint, and those of the analyzed alternatives, do not include the acreage. Therefore, there is no conflict with the rights-of-way.

57-2. The solar facility ROW, and the re-routed road around the north side of the facility, would not overlap with the ROW of Desert Xpress. Persons using the re-routed road would be limited to the road, and would not be permitted outside of the edges of the road. The size of the corridor that would remain between the facility and the mountains to the north is discussed in Section 4.22.3.1, and is 1,875 feet in Alternatives 1 and 3, and wider in the other alternatives.

The effect of the expansion of the DWMA boundary is discussed in Section 4.6.3.1 of the DEIS/DEIR. That text describes the limitations on future surface disturbance within the DWMA.

57-3. The comment does not provide specific instances where an impact conclusion is incorrectly attributed. The language in the DEIS/DEIR has been reviewed to verify that impact discussions are very clearly delineated in order to correctly attribute both beneficial and adverse impacts to the correct component of each evaluated alternative. The review verified that there are no instances where the impacts of one component (the solar facility) could be confused with those of another (the DWMA).

The text of Section 2.2.2 of the DEIS/DEIR and the calculation of the DWMA acreage in Table 4.6-1, and the corresponding tables for the other alternatives, have been modified. The text and tables in the DEIS/DEIR indicated that the Desert Xpress acreage would not be included in the expanded DWMA. In fact, the acreage would be included in the DWMA, and the tables have been revised to reflect that. The inclusion of Desert Xpress in the DWMA would not have any effect on the existing ROW grant or future notices to proceed to Desert Xpress.

57-4. A new figure showing the location for Alternative 4 has been added to the PA/FEIS/FEIR.

57-5. The text of Section 2.2.2 of the DEIS/DEIR and the calculation of the DWMA acreage in Table 4.6-1, and the corresponding tables for the other alternatives, have been modified. The text and tables in the DEIS/DEIR indicated that the Desert Xpress acreage would not be included in the expanded DWMA. In fact, the acreage would be included in the DWMA, and the tables have been revised to reflect that. The inclusion of Desert Xpress in the DWMA would not have any effect on the existing ROW grant or future notices to proceed to Desert Xpress.

- The language describing the table has been modified throughout the PA/FEIS/FEIR.
- 57-6. The locations of the temporary staging areas have been added to the figures.
- 57-7. The Desert Xpress right-of-way is shown on the map of cumulative projects. Inclusion of all cumulative projects on all project-related figures would remove focus from the purpose of each figure. The text clearly states that none of the potential alternatives would overlap with the Desert Xpress ROW.
- 57-8. A note has been added on Figure 4-1 in the PA/FEIS/FEIR referring the reader to Table 4-1 for the key.
- 57-9. The PA/FEIS/FEIR has been clarified using the newly provided information. The discussion of the location of alignment 4C has been added to Table 4.1-1.

Letter 58 – Responses to Comments from Californians for Renewable Energy (CARE) and La Cuna de Aztlán Sacred Sites Protection Circle Advisory Committee (La Cuna)

- 58-1. See Common Comment Response Number 1.
- 58-2. The proposed action and alternatives do not include a potential change in land class level classification. Chapter 4.6 of the PA/FEIS/FEIR evaluates the conformance of the proposed action and alternatives with the existing MUC classification of Limited, and determines that they conform with the requirements of MUC Class L.
- 58-3. See Common Comment Response Number 1.
- 58-4. Section 1.4.1.3 of the Draft PA/EIS discussed the Programmatic Solar EIS (PEIS) and its relationship to the Stateline Solar Farm project. Since the Stateline ROW application is listed as a Pending Application in the PEIS ROD, it is not subject to that ROD (PEIS ROD Section B.1.2) or the Plan Amendments made in that decision.
- 58-5. Section 4.2.11 of the Draft PA/EIS specifies NO_x as one of the pollutants whose emissions would be reduced through implementation of mitigation measures MM-Air-2 and MM-Air-3.
- 58-6. Construction of most of the planned facilities would not require closure of any travel lanes and therefore would not reduce the roadway capacity on roads that provide access to the work sites.
- 58-7. Due to the large extent of the Project site (approximately 2,100 acres) it would not be feasible to provide all of the electricity needs during construction via a distribution line, nor is there any evidence to suggest that such a requirement would provide a meaningful reduction in air pollutant concentrations in the region.
- 58-8. The commenter has not demonstrated a need for additional mitigation; and furthermore, it is not clear what the commenter refers to with regard to clean air engines. However, as described in mitigation measure MM-Air-2, the applicant is required to minimize truck traffic by using carpools and other methods, and to use on-road vehicles that are less than 10 years old.
- 58-9. Cumulative air emissions were discussed in the Draft PA/EIS in Section 4.2.10.4. The

geographic scope for air emissions analysis was defined as a six-mile radius. The K-Road Calico and Chevron projects are more than 50 miles away. It is not feasible or necessary for the PA/FEIS/FEIR to justify the exclusion of projects so far outside the radius of interest.

58-10. The term “cultural resource” is not defined in the National Environmental Policy Act (NEPA) or any other Federal law. A discussion of the definition of cultural resources, consistent with the definition of cultural resources provided in the BLM 8100 Manual, has been added to the PA/FEIS/FEIR in Section 3.4.1.

58-11. NHPA Section 106 and government-to-government consultation is ongoing, and BLM’s Section 106 obligations will be met prior to the Record of Decision.

The comment refers to PA/EIS statements that the project would not disturb human remains. The comment is incorrect. The text states that the project would not disturb any *known* human remains. The justification for this conclusion is supported by the description of the scope of the cultural resources surveys in Section 3.4.1.2. Those surveys were conducted throughout the project area, and did not identify any such remains. Also, mitigation measure MM-Cult-3 specifies a requirement that, should human remains be found, actions would be taken in accordance with an unanticipated discoveries plan.

58-12. The reference in the comment to the proximity of famous geoglyphs is not supported by any data that would allow evaluation. No such geoglyphs were identified or reported in the cultural resources inventory or through tribal consultation.

See PA/FEIS/FEIR Sections 5.2.2 and 5.2.3, which describes the APE within which the project could directly or indirectly cause alterations in the character or use of historic properties as contemplated in 36 CFR §800.16(d), discusses cultural resources identified within the APE, and describes how potentially affected Tribes were identified and thereafter notified and invited to participate in the Section 106 and government-to-government consultation processes. No evidence is provided that appropriate parties have been left out of the consultation processes for this project. As noted in PA/FEIS/FEIR Section 5.2.3, BLM is continuing tribal consultation throughout the project review process. Input from Tribes is summarized in PA/FEIS/FEIR Section 5.2.3 and available in full as part of the formal administrative record for this project.

58-13. As described in Section 3.5.1 of the Draft PA/EIS, the analysis of environmental justice effects was limited to potential health or environmental effects. By comparison, effects to cultural resources, including Native American resources, are discussed in Section 4.4, *Archaeological and Built Environment*. Analysis of the cumulative effects to cultural resources that could be caused or contributed to by the project is summarized in PA/FEIS/FEIR Section 4.4.10. This cumulative effects analysis considers the potential for impacts caused by the past, present, and reasonably foreseeable projects identified in PA/FEIS/FEIR Section 4.1 to combine with those of the project. These other projects include large-scale renewable energy projects that require extensive grading and development. The cumulative projects also include several transmission lines and non-renewable energy projects. As explained in Sections 4.4.11, the implementation of mitigation measure MM-Cult-1, which would require the execution of an MOA in

accordance with the requirements of NHPA §106, would address project-related impacts on cultural resources, including Native American resources.

The analysis of environmental justice effects was limited to potential health or environmental effects. Section 4.5, *Environmental Justice*, did not find that the Project's impacts would affect minority or low-income populations in a disproportionately adverse manner. Thus, the project would not have a contribution to any potential cumulative effect on environmental justice resulting from other projects. See, for comparison, the analysis of cumulative effects on cultural resources, which did consider the incremental contributory effects of all of the projects identified as BLM Renewable Energy Projects within the cumulative analysis impact area.

- 58-14. The comment suggests that the consideration of geological resources in the PA/EIS is inadequate; however, it provides no specific examples as a basis for the allegation. Section 3.10 of PA/EIS summarized the results of an assessment of the potential for paleontological resources, and 4.10.11 of the PA/FEIS/FEIR provides mitigation requirements for the conduct of pre-construction surveys, a paleontological mitigation and monitoring plan, and recovery of specimens. It is not clear what additional mitigation the commenter would suggest.
- 58-15. Baseline greenhouse gas emissions in the local landscape are irrelevant to an analysis of global climate change, so would not inform BLM's decision on this project. Instead, the PA/FEIS/FEIR compares the project's emissions to CEQ's recommended standard for deciding whether to conduct a quantitative and qualitative assessment that may be meaningful. By having emissions that are only a fraction of the CEQ standard, BLM determined that further analysis was not necessary.
- 58-16. The Multiple Use Class (MUC) Guidelines in Table 1 of the CDCA Plan state that solar electrical generation facilities may be allowed in an MUC Limited (L) area after NEPA requirements are met and the CDCA Plan is properly amended. The Proposed Action, if approved, would amend the CDCA Plan following the process anticipated in the CDCA Plan to identify the site as suitable for the proposed solar energy use. Accordingly, the proposed CDCA Plan amendment and the overall amendment process would be consistent with the CDCA Plan.
- 58-17. As discussed in Section 3.6.2.2, the San Bernardino County General Plan does not pertain to projects, such as the Stateline project, that are located entirely on Federal land.
- 58-18. Based on this and other similar comments, information on the desert kit fox has been added to Sections 3.22.1 and 4.22.3.1 of the PA/FEIS/FEIR.
- 58-19. The comment is incorrect in implying that the only mitigation is that discussed in the Plan of Development and other management plans. All of the required plans have been developed. Section 4.22.11.1, which summarizes the measures proposed by the applicant, is only one component of the mitigation. Section 4.22.11.2 specifies mitigation measures developed by BLM for other resources which would also address impacts to wildlife. Then, Section 4.22.11.3 provides details on 15 additional measures required by BLM to address impacts to wildlife. The document has been reviewed, and text changes made where appropriate, to ensure that the text refers to implementation of existing management plans, rather than preparation of such plans.

- 58-20. The comment's statement that the EIS acknowledges dire consequences for the desert tortoise and tortoise habitat is not correct. The EIS makes no such statement. The EIS/EIR acknowledges that there would be adverse impacts to both individuals and habitat from the project and the translocation process, evaluates those impacts within the context of the regional tortoise populations, and requires extensive mitigation and compensation to avoid or reduce impacts.
- 58-21. The PA/EIS addresses potential impacts of noise on wildlife in Section 4.22.3.1, in a subsection titled "*Human Presence, Noise, and Light*".
- 58-22. Section 4.21.3.1 discusses the potential for both wildfires and electrical fires to occur during both construction and operations. Section 3.11.1.3 discusses the emergency response, including time needed for responders to arrive at the site.
- 58-23. Section 4.11 analyzes the potential for intentionally destructive acts. One benefit of siting new power plants adjacent to existing transmission is to reduce the potential for security risks to transmission. With a gen-tie line less than 3 miles long, the proposed project is located such that security risks to transmission are negligible.
- 58-24. Regarding consistency with the CDCA Plan MUC Guidelines, see Response 8-21. The CDCA Plan is a comprehensive, long-range plan that was adopted in 1980; it since has been amended many times. The CDCA is a 25-million-acre area that contains over 12 million acres of BLM-administered public lands within the area known as the California Desert. The Plan initially was prepared and continues to provide guidance concerning the use of the California Desert public land holdings while balancing other public needs and protecting resources. More specifically, it establishes goals and specific actions for the management, use, development, and protection of the resources and public lands within the CDCA. It is based on the concepts of multiple use, sustained yield, and maintenance of environmental quality. The Plan anticipated that renewable power generation facilities would be proposed in the California Desert. Accordingly, it made allowances for the review of such applications, including a provision that all proposed applications "associated with power generation or transmission not identified in the [CDCA] Plan will be considered through the Plan Amendment process." The intention of this provision was to ensure that the BLM would take a planning view of all of the renewable energy applications proposed and that such projects would require an amendment to the CDCA Plan to maintain consistency throughout the plan. Amendments to the CDCA Plan can be site-specific or global, depending on the nature of the amendment. Thus, the Plan Amendment process is not a "loophole," but an intentional aspect of the Plan designed to allow for both flexibility and consistency in the use and protection of public lands and resources.
- 58-25. Congress specifically recognized multiple use and sustained yield management for the CDCA, through its requirement for the CDCA Plan in FLPMA, by providing for present and future use and enjoyment of the public lands. The CDCA Plan identifies allowable uses of the public lands in the CDCA. In particular, it authorizes the location of solar power generating facilities in MUC L and other land classifications upon NEPA review. The mitigation provided throughout the PA/EIS ensures that that public lands under consideration will be occupied only with authorized facilities and only to the extent necessary to construct, operate, maintain, and terminate the project. Compliance with

mitigation measures, the Biological Opinion, and NHPA Section 106 requirements will ensure that the Project will not unnecessarily and unduly degrade these public lands.

- 58-26. Camping is acknowledged as an allowable use of the project site in Sections 3.12, 3.15, and throughout Section 4.12. However, as discussed in Section 4.12.3.1, it is highly unlikely that the project site itself is used for camping. The importance of the project site to local recreational opportunities is that it includes three open routes that may be used to access the Stateline Wilderness Area or Mojave National Preserve. The PA/FEIS/FEIR analyzes the impact to this access, and requires mitigation to ensure that access is not affected. Given the millions of acres of vastly more preferable land available for camping in the region, analysis of the loss of this small area is not reasonable.
- 58-27. OHV access on Class L lands, such as the project site, is restricted to authorized routes of travel. Although approximately 5.2 miles of open routes would be closed as a result of the project, they would be re-directed within the same general area. The re-direction of these routes is not anticipated to induce substantial numbers of OHV users to abandon designated OHV routes for illegal cross-country use that would result in adverse effects on plants and wildlife.
- 58-28. The California Public Utilities Commission (CPUC) sets utilities rates for all investor-owned utilities every 3 years through general rate case proceedings. Consequently, neither the Applicant nor BLM have authority over any utility rate changes that may occur as a result of the project. The Applicant has a PPA with SCE for the electricity generated by the project, but the rate at which the electricity is sold to SCE does not determine the rate at which electricity is sold to consumers; therefore, the project's effect on utility rates is beyond the scope of analysis for the PA/EIS.
- 58-29. Although there are National Wilderness Areas in the project vicinity, the project site is not located within any designated wilderness area, and therefore is not subject to the Wilderness Act of 1964. As discussed in Section 4.15.1.3, the project would have no direct effect on the wilderness areas in the project vicinity.
- 58-30. The comment's reference to the site as being within a wilderness area is not correct. Therefore, there is no congressional mandate being affected by the project.
- 58-31. The project would include construction of a new access road that is 1.65 miles long. This new road would be constructed in an area that is already crisscrossed by numerous open routes. Construction of the new access road proposed by the project is not anticipated to provide substantial new access to areas of the open desert that are not currently accessible by other routes.

Section 4.16.3.1 specifically analyzes the potential for the project to impact traffic on Interstate 15, and concludes that construction-related traffic could create an adverse impact during Friday peak traffic hours. As a result, MM-Trans-2 is proposed by the applicant to minimize truck traffic during those times.

- 58-32. Solid waste generation, water consumption, and air pollutant emissions associated with the life cycle of PV panels are not included in the analysis. The locations where such impacts would occur is speculative and would not likely provide an accurate representation of such waste. Section 2.1.3.4 and several other sections of the PA/FEIS/FEIR discuss how the applicant operates a panel recovery and recycling

program such as that described in the comment.

- 58-33. The visual resource analysis in the Draft PA/EIS adequately identifies the potential nighttime lighting impacts of the project (see Page 4.18-3), and provides a mitigation measure to reduce both construction-related and operational lighting impacts (mitigation measure MM-VR-2).
- 58-34. The project's water consumption is described in Chapter 2, pages 2-6 through 2-7, and throughout Section 4.19. As described in Chapter 2, the Project proposes to use solar photovoltaic technology, not concentrating solar power technology. Therefore, the report on methods to reduce the water consumption of concentrating solar power systems mentioned by the commenter (DOE 2009) is not applicable to the project.
- 58-35. As discussed in Section 4.19, water supply for the project is groundwater; however, the source of that groundwater is not the Colorado River. The project would not remove water from the Colorado River, or otherwise affect Colorado River flows. The proposed withdrawal of groundwater would minimally affect aquifer levels, but these have no potential to affect the Colorado River.
- 58-36. On an issue-by-issue basis, Chapter 4 identifies the geographic and temporal scope of the cumulative impacts analysis area, provides a basis for the boundaries of each, identifies existing conditions within each cumulative impacts assessment area, identifies the direct and indirect effects of the Project and alternatives, and identifies past, present and reasonably foreseeable future actions that have a reasonable potential to affect resources within the applicable geographic and temporal framework. The PA/EIS analyzes cumulative impacts of past, present and reasonably foreseeable future actions, including utility-scale renewable and other development projects, on each of the resource areas in Chapter 4, including mitigation measures to avoid or minimize cumulative impacts.
- 58-37. The area of cumulative effects varies by resource. The project's contribution to potential cumulative impacts consists of impacts on the archaeological sites identified in Section 4.4, and no sacred sites or places of traditional cultural or religious importance to Indian tribes were identified within the area that would be affected by the project. Consequently, the geographic scope used for the cumulative impacts analysis in Section 4.4 is appropriate for the cumulative impacts to which the project's incremental effects could contribute.
- 58-38. The comment suggests that the consideration of mitigation measures in the PA/EIS is inadequate; however, it provides no specific examples as a basis for the allegation. Accordingly, the BLM is unable to provide a more detailed response. Note that throughout Chapter 4, the effectiveness of mitigation measures is described for each potential project impact, and summarized in the subsections entitled "Residual Impacts after Mitigation Incorporated".

Consultation will be completed prior to authorization of the project.

- 58-39. See PA/FEIS/FEIR Section 5.2.2 and 5.2.3, which describe the NHPA Section 106 process and the reasonable, good faith efforts undertaken by the BLM in exercising its responsibilities in implementing it for this project. As explained therein, individuals from 11 federally recognized tribes formally were notified and invited to participate in the Section 106 and tribal consultation processes. Public involvement also is a key factor in a

successful Section 106 consultation; accordingly, the views of CARE, La Cuna, and other members of the public were solicited in the NOI published for this Project in the Federal Register (76 Fed. Reg. 47235-47236) and oral and written comments were considered during the scoping process (see, e.g., the Scoping Report included as Appendix B to this PA/EIS), and considered throughout the process.

- 58-40. As indicated in Sections 1.1.1 and elsewhere, the BLM processes applications for commercial solar energy facilities as right-of-way authorizations under Title V of FLPMA. FLPMA establishes public land policy; guidelines for administration; and provides for the management, protection, development, and enhancement of public lands. In particular, the FLPMA's relevance to the Project is that Title V, §501, establishes BLM's authority to grant rights-of-way for generation, transmission, and distribution of electrical energy. FLPMA mandates that BLM manage the public lands for multiple uses. Multiple use means the "management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people. ..." As identified in FLPMA, this includes "providing for the long-term needs for future generations for renewable and nonrenewable resources." The BLM is processing the Applicant's application within the FLPMA framework.
- 58-41. The specific discussion of the CDCA Plan Chapter 7 criteria has been added to Section 1.4.1.2 of the PA/FEIS/FEIR.
- 58-42. The alternatives development and screening process employed in the PA/EIS is described in PA/FEIS/FEIR Section 2.1.1. Sections 2.1 through 2.6 describe the alternatives that were analyzed in detail, and Section 2.8 describes those that were considered but not carried forward for more detailed evaluation. Potential impacts of the proposed action and alternatives are analyzed in PA/FEIS/FEIR Section 4.4. As indicated in that section, the only sensitive cultural resources included within the boundaries of any of the action alternatives are two 20th century transmission lines. Therefore, no identified cultural resources would be disrupted, and additional alternatives to avoid such resources do not need to be considered.
- 58-43. Chapter 4.6 of the PA/FEIS/FEIR evaluates the conformance of the proposed action and alternatives with the existing MUC classification of Limited, and determines that they conform with the requirements of MUC Class L.
- 58-44. The PA/EIS acknowledges that the Project will result in the irreversible and irretrievable commitments of natural and cultural resources in Section 4.23.

Letter 59 – Responses to Comments from Western Watersheds Project

- 59-1. As of October 12, 2012, the Department of the Interior has authorized over 10,000 MW of renewable power projects on public lands. As described on page 1-2, Section 211 of the Energy Policy Act of 2005 directs the Secretary of the Interior to authorize *at least* 10,000 MW of renewable power projects by 2015. Accordingly, the department may continue to approve renewable power projects on the public lands even after reaching this goal. Consideration of the proposed renewable energy project on public lands is consistent with this direction. See also Common Comment Response Number 1.

- 59-2. BLM has a statutory requirement under FLPMA to consider ROW applications, which trigger a requirement for environmental review under NEPA. BLM has no such statutory requirement to accept ACEC nominations from the public. Therefore, while the ROW application has driven the need for an environmental review, the ACEC nomination has not. Instead of being a formal application which BLM is legally required to consider, the ACEC nomination was received by the agency during scoping as a public comment on a potential alternative to consider as part of the review process. BLM considered that scoping comment, and determined that it had merit, thus leading to its incorporation into the alternatives analysis. There is no requirement that every component of an alternative be driven by the purpose and need. Instead, alternatives development is commonly driven by an attempt to modify the proposed action in a manner which reduces or avoids its impacts. This is the case with BLM's consideration of the modification of the DWMA boundary.
- 59-3. See Common Comment Response Number 1. BLM considered the alternatives discussed in the comment, and the rationale for not performing more detailed analysis of those alternatives was discussed in Section 2.8, and summarized in Table 2-9, of the DEIS/DEIR.
- 59-4. The quality of the tortoise habitat in the project area, and the impact of tortoise habitat loss and degradation, were acknowledged and discussed throughout the DEIS/DEIR. It is correct that the 1994 Tortoise Recovery Plan proposed the project area (part of the Northern Ivanpah Valley Unit) to be included in the proposed Ivanpah DWMA. However, the 1994 Recovery Plan also states, on Page ii, that their recommendations are general areas, and specific boundary delineation should be accomplished by land management agencies in close coordination with the Fish and Wildlife Service and State wildlife agencies. In 1994, USFWS also designated critical habitat for the desert tortoise, and chose not to designate the Northern Ivanpah Valley Unit. Based on that decision, and other factors, BLM, in coordination with USFWS, chose not to designate the Northern Ivanpah Valley Unit as part of the DWMA in the 2002 NEMO Plan amendments.
- While focusing on the impact of power plants, the comment fails to acknowledge the enormous amount of tortoise habitat in Ivanpah Valley which has been permanently protected from further development. As discussed in Section 4.22.10.4 of the DEIS/DEIR, the analysis demonstrated that the cumulative projects would impact up to 15 percent of the tortoise habitat in Ivanpah Valley. Most of the remainder of the habitat is currently protected from any further development by being designated as part of the Mojave National Preserve, Ivanpah DWMA, or other wilderness areas or ACECs. If the modification of the Ivanpah DWMA boundary, which would add an additional 23,000 acres to the protected area, is implemented, then the remaining 85 percent of the habitat in the valley would be permanently protected from further development.
- 59-5. The comment that the commenter and other authors do not consider the desert tortoise range to include the Sonoran Desert region of northern Mexico is noted. BLM is aware of the ongoing studies and discussion in the literature regarding potential distinctions between the regional populations. Recent USFWS literature on the tortoise, including the 2012 *Status of the Species and its Critical Habitat – Rangewide: February 9, 2012*

continues to refer to the recognized range of the species as including the Sonoran Desert and northern Mexico. BLM's analysis is based on this information.

It is not a requirement for the PA/FEIS/FEIR to identify and propose means to accomplish the full range of key recovery actions identified by the USFWS. However, it is anticipated that the USFWS will consider these actions in their analysis of the project in the Biological Opinion (BO). Even though there is no requirement for BLM to consider, for instance, Recovery Action 2.9 (securing of habitat lands for conservation), that action was considered, and the proposed action includes securing of an additional 23,000 acres of land for conservation within Ivanpah Valley. Similarly, the connection of functional habitat was considered by both the Applicant and BLM in conducting the Regional Assessment (NatureServe 2012), and by BLM in analyzing the impact of the proposed action and alternatives on the tortoise connectivity. Project configurations designed to maximize tortoise connectivity were identified and specifically analyzed as alternatives in the PA/FEIS/FEIR. The agency acknowledges that connectivity studies are ongoing, and the PA/FEIS/FEIR does not prejudice the outcome of those studies. However, these studies are not needed to assess the impacts of the proposed project, as they are being conducted in areas outside of the project footprint and BLM already has a significant amount of information on development impacts in the Ivanpah Valley as a result of various actions, including conservation actions, taken in the area over the years. The studies may influence future conservation measures or the details of project mitigation measures ultimately selected from options identified in the EIR/EIS or the USFWS BO. It is worth noting that the referenced studies would not be conducted if not supported by the Applicant, and the Applicant would not be supporting those studies if it did not have the ability to apply for a ROW grant.

Please note that, while the commenter points out that the DEIS/DEIR did not enumerate two of the Recovery Actions in the 2011 Recovery Plan, the commenter similarly failed to fully list all relevant recovery actions. Among these is Recovery Action 2.1, which recommends that solar project facilities be sited outside of DWMA's and ACECs. As discussed in Section 2.8.1, this was a criterion used by the Applicant in identifying the proposed Stateline site as a potential solar facility.

- 59-6. The potential impacts on desert tortoise listed in the comment were all addressed in the DEIS/DEIR. The DEIS/DEIR acknowledged that the project would have adverse impacts to both individuals and habitat.
- 59-7. Translocation of a species, as is being proposed for desert tortoises on this project, is not addressed in the BLM's 1745 Manual, which applies to the introduction, transplant, augmentation and re-establishment of fish, wildlife and plant species. Translocation is defined as "the transport from one location to another" and does not fall under the guidance of the 1745 manual. Further, the 1745 Manual references land use planning manual sections that have been removed: in November 2000, the BLM removed BLM Manual Sections 1617 and 1622 and issued Manual 1601. Manual Section 1601 (2000) explains that site-specific plans (for example, habitat management plans) are implementation level decisions rather than planning decisions.

The Applicant's Translocation Plan was provided on request, and is posted on the project website at http://www.blm.gov/ca/st/en/fo/needles/stateline_solar_farm.html. The plan is

also included as an attachment to the PA/FEIS/FEIR.

- 59-8. The potential spread of upper respiratory tract disease as a risk in translocation was listed as a potential impact in the analysis in Section 4.23.3.1. The Translocation Plan discussed how disease prevalence was a criterion in selection of recipient sites, and specified procedures to protect against spread of disease, as mandated by the USFWS *Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance*.
- 59-9. See Response to Common Comment Response Number 3.
- 59-10. The DEIS/DEIR acknowledged that the project site could potentially be used as foraging habitat for the bighorn sheep. However, there is no direct evidence that the site is actually used. Therefore, impacts are speculative, and mitigation is not required.
- 59-11. The DEIS/DEIR acknowledges the presence of each of the referenced species, including golden eagles, in the area, as discussed in Section 3.22.1, Table 3.22-1, and Section 4.22.3.1. The DEIS/DEIR provides substantial baseline data relative to special status bird species, as identified in three years of point counts. The document quantifies observations of golden eagle, raven, prairie falcon, peregrine falcon, northern harrier, and burrowing owl. Appendix C of the BRTR lists all other species that were observed as being present in the surveys. Impacts were evaluated for other species which were not observed, but for which potential nesting habitat is present. Additional baseline data and impacts analysis, based on the applicant's Bird and Bat Conservation Strategy (BBCS), has been added to Section 4.22.3.1 of the PA/FEIS/FEIR. The status of Clark Mountain as being included in an identified Important Bird Area (IBA) is noted, but is not relevant, as the species present, and potential impacts to those species, have already been disclosed in the DEIS/DEIR.

The McCrary article addressed bird collisions with mirrored heliostats, which are specifically designed to be as reflective as possible, and not with PV panels, which are designed to be as absorptive as possible. McCrary acknowledged that avian collisions are an inevitable by-product of almost all man-made structures, and provided references suggesting that reflective surfaces are more prone to such collisions than non-reflective surfaces. However, the article does not make an attempt to incorporate configuration into the analysis. It is clear that vertical reflective surfaces, being aligned perpendicular to the maximum velocity of a flying bird, would be more likely to be struck, and also more likely to cause injury or mortality, than flat or tilted surfaces. McCrary's suggestion was that power tower projects should not be sited in close proximity to open water. However, he made no recommendation of distance.

Given the fact that the PV panels are designed to be non-reflective, and are tilted so that they do not present a vertical mirrored surface, it is expected that the potential for fatal collisions with PV panels would be insignificant compared to the potential associated with vertical surface such as the mirrored sides of buildings.

The Bird and Bat Conservation Strategy is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR. Additional baseline data, impacts analysis, and applicant-proposed mitigation measures, based on the Bird and Bat Conservation Strategy, have been added to Section 4.22.11 of

the PA/FEIS/FEIR.

59-12. Unlike the CDCA Plan's requirement for compensatory mitigation for desert tortoise, the Plan has no provision allowing BLM to require compensatory mitigation for BLM sensitive plant species. In addition, there is no state requirement for compensatory mitigation for state-protected rare plants.

59-13. The wash habitat impacted by each alternative was quantified in Table 4.17-1 of the DEIS/DEIR. Mitigations included the original siting of the facility to avoid major washes, as well as following mitigation measures as specified by CDFW in a Streambed Alteration Agreement (see mitigation measure MM-Veg-6 in the DEIS/DEIR).

The analysis of hydrology in Section 4.19.3.1 of the DEIS/DEIR acknowledges that soil erosion may increase sedimentation, and this can affect water bodies, plants, and wildlife habitat. The pre- and post-development effect of the facility on surface water flows rates and sedimentation was quantified in Table 4.19-3 of the DEIS/DEIR.

The sentence on Page 2-43 that referred to washes potentially being under the jurisdiction of the USACE has been clarified in the PA/FEIS/FEIR. That statement has been replaced with the determination of the USACE that the washes are not under their jurisdiction.

59-14. The definition of the Area of Potential Effect (APE) was presented on Page 4.4-4 of the DEIS/DEIR. That definition included areas outside of the project study area that could potentially be affected by indirect effects, including visual, auditory, and atmospheric effects. Mitigation measures, primarily related to avoidance, were presented in Section 4.4.11 of the DEIS/DEIR. The eastern boundary of the project site was deliberately designed to avoid close proximity to the dry lake shoreline.

Please note that many commenters have requested that project footprint be moved closer to the shoreline in order to increase space for desert tortoise habitat on the western project boundary. The siting of the project needs to balance protection of a variety of resources.

59-15. Alternative water supplies were considered by BLM and the Applicant. Trucking of water results in other impacts, including air and GHG emissions, traffic impacts, and public safety issues. Given the fact that the water analysis shows that there is plenty of available water supply in this area (reserves are not depleted, as stated in the comment), a local water supply for this temporary use is considered to be most appropriate.

59-16. Section 3.7 of the PA/FEIS/FEIR has been revised to update the status of the grazing allotment. The reductions in acres and AUMs are not reflected in the extension, as they would not occur until after the project is approved.

59-17. The analyses in Section 4.15 of the DEIS acknowledge that noise from project construction would be heard in the Stateline Wilderness Area, and Section 4.18 acknowledges that the project would be visible from the Stateline Wilderness Area. In addition, Section 4.15 discussed how the modification of the DWMA boundary would have a beneficial impact on the Stateline Wilderness Area.

59-18. With respect to the definition of mitigation including "Avoiding the impact altogether by not taking a certain action or parts of an action", please note that there is no functional difference between this and the development and consideration of project alternatives. Avoiding an impact by not taking the action is equivalent to either the No Action

Alternative (Alternative 5 in the DEIS/DEIS) or either of the No Project Alternatives (Alternatives 6 and 7 in the DEIS/DEIR). Alternative 4 in the DEIS/DEIR is functionally equivalent to not taking a certain part of the action, in this case, construction of part of the solar farm in the area south of the golf course.

The PA/FEIS/FEIR has included all legally required acquisition of compensation habitat and enhancement measures, both for the desert tortoise. Although specific compensation for other special status species is not required, habitat acquired for the tortoise would also provide compensation for many or all of those species.

The Stateline project is not under the jurisdiction of the California Energy Commission (CEC), so the compensation requirements specified for Ivanpah SEGS are not relevant to the Stateline project.

- 59-19. The effect of the Solar PEIS, DRECP, and expansion of the Ivanpah DWMA on Ivanpah Valley will be to prohibit any further solar development in any areas that could reasonably result in overlapping of cumulative impacts. This would result in protection of resources in these areas, rather than impacts to resources.

Letter 60 – Responses to Comments from Lahontan Regional Water Quality Control Board

- 60-1. Designated beneficial uses of surface water were listed in Table 3.19-1 of the DEIS/DEIR. Designated beneficial uses of groundwater were listed in Table 3.19-2.

The issues associated with the beneficial uses that are applicable to the project area were evaluated throughout the DEIS/DEIR. Section 4.19 of the DEIS/DEIR had specific subsections to evaluate groundwater recharge, flood peak attenuation, wildlife habitat, and water quality for both surface water and groundwater, and municipal and domestic supply for groundwater. Issues associated with some designated beneficial uses are not applicable to the project site. These include municipal and domestic supply for surface water, agricultural uses, freshwater habitat, water contact recreation, industrial service supply, and freshwater replenishment. In addition to those discussions throughout Section 4.19.3 and the correlative sections for the other alternatives, the same issues were also discussed within the framework of the CEQA significance criteria for surface water and groundwater. These discussions were somewhat repetitive, but were done separately to ensure that CEQA criteria were met. A similar re-analysis of the exact same issues, but within the framework of the designated beneficial uses, would be repetitive, and would not add anything to the document. The document already lists the beneficial uses, and provides full analysis of those that are relevant.

The comment that the document should provide alternatives to avoid impacts or describe specific mitigation measures to minimize unavoidable impacts to a less than significant level is noted. This was complied with in the evaluation of CEQA significance determinations in Section 4.19.3.2, which concluded that all impacts would either be less than significant, or would be reduced to less than significant following implementation of mitigation.

The commenter's request to consider alternatives that would decrease the project's impact to ephemeral drainage habitat fails to acknowledge the consideration of these

drainages and other resources that was incorporated into original siting of the project. As discussed on Pages 1-3, 2-9, and 2-40 through 2-41 of the DEIS/DEIR, the project design, as proposed to BLM, was originally sited, and has subsequently been reduced in size and reconfigured, to avoid critical habitat for tortoise, other areas designated for protection of resources, and ephemeral drainages repeatedly since 2008. The statement that the DEIS/DEIR has considered only various site placement alternatives is inaccurate, as BLM has subsequently considered even further size reduction in the development of Alternative 4, as well as three no project alternatives.

In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR.

- 60-2. All of the issues raised in the comment were discussed throughout the DEIS/DEIR. The comment does not provide any specific statements of impacts that would occur, or mitigation that should be required, but which are not addressed in the document. Construction wastes were discussed in Sections 2.1.3.1, 2.1.3.5, and 4.11.3.1. Wetlands and floodplains were discussed in Sections 3.17.1.4, 3.198.1.1, 4.17.3.1, and 4.19.3.1. Construction activities were discussed in Section 2.1.3.2, and impacts associated with those activities were discussed in specific subsections within each resource analysis in Chapter 4. Impacts associated with land development were discussed in Section 4.6.
- 60-3. The document has been reviewed to verify that the analysis does not rely on permit compliance to conclude that all impacts are less than significant. Although permit requirements are mentioned throughout the document, and some mitigation measures (such as MM-Water-1 and MM-Water-8) require the applicant to provide permit information to BLM, that does not imply that compliance with the permits, on its own, would mitigate impacts. Therefore, no other modifications have been made to the PA/FEIS/FEIR.
- 60-4. BLM generally agrees with the analysis of stormwater drainage impacts presented by the commenter. Each of these issues has been addressed in the analysis of impacts in Section 4.19 of the DEIS/DEIR. However, BLM disagrees with two conclusions stated in the comment, specifically, that reconstructing the hydrology must necessarily decrease water storage capacity and increase water flow velocity. These statements can be correct if the design and implementation of the stormwater management system is not done correctly. However, the specific purpose in installing the basins is to increase water storage capacity and to decrease flow velocity, both of which are technically feasible. Therefore, an assumption that modification of hydrology by constructing basins necessarily leads to decreased water storage and velocity increase is incorrect. BLM has worked with the applicant to verify that the basins are sized sufficiently to achieve the purpose of water

storage and velocity decrease to the extent needed to avoid the impacts discussed in the comment.

- 60-5. The impacts to all surface waters mentioned in the comment were evaluated in Sections 4.17 and 4.19 of the DEIS/DEIR. The impacts to ephemeral channels were quantified in terms of acreage (see Table 4.17-1, and in terms of flow volume and velocity (see Tables 4.19-3 and 4-19.4), and these impacts were identified as long-term. The comment fails to acknowledge the substantial consideration of avoidance of drainages and other resources that went into the original project siting effort, and in the subsequent development of the action alternatives.
- 60-6. Tables 4.19-3 and 4.19-4 of the DEIS/DEIR present the results of the requested modeling of site hydrology. Additional text has been provided in the PA/FEIS/FEIR describing how the modeling considered sediment delivery, the water retention capability of the engineered improvements, and the applicant's maintenance plan.
- 60-7. The PA/FEIS/FEIR text has been revised to identify the closest springs to the project area, and evaluate the potential for the cumulative projects to affect those springs. Because those springs are more than 4 miles away from the groundwater production wells, quantitative evaluation of the potential to affect the other referenced springs is not reasonable.
- 60-8. The comment does not specify any resources or impacts that were left unaddressed in the DEIS/DEIR. As discussed in the response to Comment 60-1, the DEIS/DEIR analyzed impacts to all applicable resources with respect to NEPA requirements, and with respect to the CEQA significance criteria. Re-analyzing the same technical issues within the context of another framework would be repetitive and unwieldy, and would not add anything to the analysis.
- 60-9. BLM disagrees with the conclusion, in the comment, that upgradient and downgradient basins do not address the potential for impacts during flooding, and may result in increased drainage concentration. The very reason for implementation of basins is to capture stormwater flow from upstream areas, slow it, and then release it at a slower velocity as sheet flow. Sheet flow, by definition, is the action of spreading water out over a larger surface area, thus reducing concentration instead of increasing it. It is agreed that surfaces developed to promote sheet flow will eventually begin to form channels again. That is the reason for requiring site inspection and response actions following storm events in MM-Water-9.

BLM agrees that infiltration, particularly during torrential storm events, is at a minimum and erosion, even on flat surfaces, can rapidly occur. The reference to infiltration in the comment is not applicable to any of the impacts, because infiltration is only applicable at the point of precipitation, and mostly does not occur in the flow paths. Stormwater issues associated with the project are a result of stormwater flowing onto the project site from the upstream mountains, not from precipitation on the site itself. It is agreed that erosion currently occurs on the site, and would be increased if the site was graded without installation of basins to reduce stormwater velocities. However, the agency does not agree that the presence of basins would result in increased flows and drainage concentration. The basins have been appropriately designed to reduce flows and reduce

drainage concentration.

- 60-10. The information on authorizations under WDRs or General WDRs has been added to the text of the FEIS, in Section 3.19.2.2. The Jurisdictional Determination information, including the determination letter from USACE, is included as an Appendix to the PA/FEIS/FEIR. The permits that are or may be required have been added to Section 3.19.2.2. Mitigation measure MM-Water-9 already lists specific requirements of the Construction SWPPP, and the need for a Streambed Alteration Agreement was already discussed in Section 3.17.2.2 of the DEIS/DEIR. However, other specific mitigation requirements of the permits cannot be listed until the need for such permits is identified, and the permits have been issued.
- 60-11. A narrative discussion of the delineation methods was provided in DEIS/DEIR Section 3.17.1.4. A map of surface waters would not be informative because there are no perennial surface waters in the area, and the entire site hosts ephemeral drainages. Text has been added to the PA/FEIS/FEIR referring the reader to the Jurisdictional Delineation for further information on survey methods and results. The impacts have been quantified in Table 4.17-1 of the DEIS/DEIR.

The BLM is required to respond to the application as presented and the activities associated with the projects ground treatment. In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR. Avoidance of major washes, with some impacts to minor washes is a consideration for the siting of the project and those considerations were used to identify the best location for the panel and facilities within the study area.

The PA/FEIS/FEIR text has been revised to identify the closest springs to the project area, and evaluate the potential for the cumulative projects to affect those springs. Because those springs are more than 4 miles away from the groundwater production wells, quantitative evaluation of the potential to affect the other referenced springs is not reasonable.

The Groundwater Monitoring and Reporting Plan and Water Supply Assessment have been attached to the PA/FEIS/FEIR as appendices. Implementation of these is required in MM-Water-2 and MM-Water-3, and will be required as a condition of approval in the ROD.

- 60-12. The reference to Water Board regulation of saline intrusion has been removed from the text of the PA/FEIS/FEIR. Disposal of residuals from water treatment is discussed in the text of mitigation measure MM-Water-2 in the DEIS/DEIR.
- 60-13. The text of the DEIS/DEIR does not cite mass grading as a method to maximize

groundwater infiltration, as stated in the comment. The text cites mitigation measure MM-Water-5 as requiring basin and slope design to allow the basins to serve as infiltration points, which in turn promotes groundwater infiltration.

The comment that the use of basins would concentrate flows and increase sediment transport, even with adequate design and maintenance, is contradicted by the Water Board's Stormwater Best Management Practices, Chapter 10, which acknowledges that detention basins "are designed to attenuate peak flows to prevent downstream erosion". That document goes on to say that "If properly designed and maintained, treatment basins can effectively trap sediment . . . basins also offer a degree of flood protection and help prevent stream bank erosion by attenuating peak flows". The comment's reference to basins serving to concentrate flows is incorrect, and is contradicted by the text of the Water Board's Stormwater Best Management Practices document. In fact, basins have the complete opposite effect by capturing flow that enters the site in discrete channels, and spreading that flow out over a greater width, thus reducing flow velocity.

The commenter's request that design alternatives be considered which maintain the existing hydrology has been considered by BLM and the applicant in the PA/FEIS/FEIR. In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR.

he commenter's request that design alternatives be considered which re-direct flows to areas where they will dissipate by percolation also makes sense. Infiltration is promoted when stormwater flows have their velocity slowed, and when those flows are spread out over a large area rather than being concentrated in channels. This is precisely the manner in which the upstream and downstream retention basins are designed to operate.

Letter 61 – Responses to Comments from EPA

- 61-1. The PA/FEIS/FEIR has been revised to include the information from the USACE nexus evaluation. The DEIS/DEIR already identifies and quantified ephemeral drainages and non-interstate tributaries to Ivanpah Lake. That information remains in Table 1-2, Section 2.1.3.5, Section 3.17.1.4, 3.19.1.1, Table 4.17-1, Section 4.17.3.1, and Section 5.1.1.
- 61-2. The 2011 Jurisdictional Delineation has been attached to the PA/FEIS/FEIR.

The DEIS/DEIR discussed site configuration and construction and operational methods to be used to reduce discharges, These included stormwater management features and water and waste management (discussed in Section 2.1.3.1), avoidance of construction in drainage channels (also Section 2.1.3.1), MM-Water-8 (Stormwater Pollution prevention

Plan), MM-Water-9 (Stormwater Management Plan), and MMVeg-5 (revegetation of temporary disturbed areas).

- 61-3. No Waters of the United States subject to CWA Section 404 would be impacted by the project, so the LEDPA analysis is not applicable.
- 61-4. The project design has already included avoidance of major washes, and the DEIS/DEIR already discussed the requirement to obtain a Streambed Alteration Agreement, including appropriate mitigation, for impacts to state waters. The BLM has worked diligently with the applicant to address designs that will limit impact to drainages. In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR.
- 61-5. In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR.

Comments 61-5 and 61-6 appear to contradict each other. Comment 61-5 provides a suggestion for how to protect arrays placed close to drainages, and the introductory text states that “many of the ephemeral drainages on the site have remained relatively static for nearly two decades and may not pose an imminent threat to solar arrays placed in their proximity.” Then, Comment 61-6 goes on to recommend not placing arrays in the static drainages. If the introductory text and Comment 61-5 are correct in theorizing that the static drainages are not very active and arrays can be designed to withstand stormwater flow, then this would seem to suggest that these are areas in which solar arrays can be safely located.

- 61-6. The DEIS/DEIR already discussed the Applicant’s plan to size road crossings in relation to the size of the wash. In the PA/FEIS/FEIR, the text of mitigation measure MM-Water-7 has been revised to require that road crossings be designed to provide adequate flow-through for storm events.
- 61-7. The discussion of impacts to wetlands in Section 4.17.3.1 has been revised to more fully describe the adverse impacts of disturbance of ephemeral washes. Also, the discussions of the Alternatives 5, 6, and 7 in Sections 4.17.7, 4.17.8, and 4.17.9 have been revised to

discuss the benefits of maintaining the washes.

- 61-8. DEIS Section 4.19.3.1 (Pages 4.19-7 through 4.19-10), including Table 4.19-3, provided the results of the flow modeling analysis based on the proposed design. That proposed design included filling of minor drainages by disc-and-roll and cut-and-fill methods. The analysis concluded, for the proposed action, that downstream flows would increase by approximately 2 percent in the 1.2 year flood calculation, and 0.21 percent in the 100 year flood calculation. The PA/FEIS/FEIR includes a mitigation measure, MM-Water-9, that requires inspection and response actions for downstream areas after every storm event. The agency has concluded that an increase of 2 percent does not constitute an adverse impact, and that any impacts that do occur would be appropriately mitigated.
- 61-9. The most recent drainage plan is part of the Applicant's Plan of Development, which is included as part of the PA/FEIS/FEIR.
- 61-10. The BLM respects the commenter's research into other installation methods and products. However, the BLM is reviewing the project as proposed by the applicant and in keeping with the Purpose and Need, reviewing the proposal with respect to the POD and the application. The BLM is required to analyze the proposal as described by the applicant and to respond thus, without the broader experience, it would be infeasible for the BLM to propose or impose other products on the applicant.
- 61-11. The locations where fencing would be used was described in Section 2.1.3.1 and shown in Figure 1-2 of the DEIS/DEIR. A discussion of the effect of fencing on the drainage systems has been added to Section 4.19.3.1 of the PA/FEIS/FEIR. The comment does not provide a reference to specific hydrologic performance standards that the commenter believes should be met. In fact, the primary performance standards for the fence are to meet the requirements for tortoise exclusion and site security. By definition, a fence that meets those standards requires a mesh size and a proximity to ground level that will affect hydrology. Therefore, the only available hydrology performance standard is fence inspection and repair after storms, which are already required in the PA/FEIS/FEIR.
- 61-12. The agency appreciates the direction to the NPS article discussing the effect of fences on hydrology in a similar desert wash area. Several of the effects observed by NPS following that storm, and discussed in the article, have been incorporated into the revised discussion of impacts in Section 4.19.3.1. The observations raised in the article demonstrate how difficult it is to eliminate these hazards for the Stateline project. The article provides an excellent discussion of how such fencing can create stormwater flow and erosion hazards. However, it provides no solution. Instead, the article concludes by requesting a review of fence performance with regard to hydrologic criteria by third-party, independent experts.

BLM has identified the interaction between fencing and hydrology as a major issue of concern on all development projects constructed in desert areas, not just solar plants. As acknowledged in the NPS article, fence design must first and foremost be driven by the purpose of the fence. In their case, the purpose was border security and resource protection. In the case of the Stateline project, the purpose is physical security of the power plant, and resource protection for desert tortoises. These absolute needs establish the necessary location, mesh size, and height of the fence, and these parameters cannot be

compromised. On other projects, BLM has written mitigation measures requiring that “the use of flow-obstructing fencing shall be avoided; instead, fencing that allows for passage of water while minimizing buildup of debris shall be utilized”. However, this requirement is meaningless if such requirements are physically impossible to achieve.

In the absence of a physical method to avoid debris buildup, BLM continues to require the only feasible method, which is post-storm inspection and response action.

- 61-13. The BLM has reviewed the siting of the project and the hydrology report for the project. In that review the project is sited in an area that is subject to extreme drainage patterns that are typically not located within areas deemed floodplains. Since there is no defined floodplain as stated in the EIS, and since the project is not located in a floodplain as defined in EO 11988, the BLM finds no reason to provide additional analysis. See EO 11988 Section 6(c).

The situation of the project site with respect to FEMA floodplains was discussed in the DEIS in Section 3.19.1.1. No consultation has been conducted, or is required, with FEMA.

- 61-14. The comment incorrectly infers that measure MM-Water-2 requires a non-Ivanpah Valley Groundwater Basin (IVGB) alternative water supply. Section 4.19.3.1 of the DEIS/DEIR describes that the secondary source is another well located within the IVGB, 4,250 feet west of the facility. That text also described that water treatment would be used if water quality is not sufficient, but this water treatment would still be supplied by water from one of the two on-site wells. The analysis by BLM and the County of the available groundwater supply indicates that volumes are sufficient for this temporary use, and that no non-IVGB source needs to be considered.

The cumulative analysis in DEIS/DEIR Section 4.19.10 analysis includes the full range of entities that would use groundwater in the IVGB during the 2-4 year construction period. The analysis used conservative assumptions regarding water use by other users, and concludes that groundwater resources would not become overextended during this timeframe. Following project construction, groundwater use by the project would be reduced to a *de minimis* level. The referenced events of additional growth, influx of large-scale solar projects, drought, climate change, or utilization of existing and pending rights are not applicable within the timeframe of the construction of the Stateline project. No additional water-using developments or large-scale solar projects are proposed. Drought and climate change can certainly impact groundwater availability, but not on a 2-4 year timeframe. The cumulative analysis already uses a conservative assumption of use of existing rights rather than current use rates.

The text of the DEIS/DEIR in Section 2.1.3.1 states that no panel washing would be done. A reference to panel washing in Section 4.2.4.1 has been removed from the PA/FEIS/FEIR. Other sections of the DEIS/DEIR clearly state that no water would be used for washing panels (see Section 4.19.3.1).

- 61-15. Section 4.19.3.1 of the DEIS discusses the anticipated drop in groundwater levels at nearby wells. The comment’s reference to potential impacts on groundwater-dependent vegetation is taken from the Genesis DEIS, where groundwater-dependent vegetation was documented at Palen Lake. No such vegetation is present at Ivanpah Dry Lake. The

depth to groundwater at the project site is more than 100 feet, so potential impacts on groundwater-dependent vegetation are moot.

- 61-16. The text of mitigation measure MM-Air-1 requires that the Applicant consult with MDAQMD and submit the Air Quality Construction Management Plan for their review no later than 60 days before construction begins. This ensures that the measures will be implemented at the earliest stage of construction.

The PA/FEIS/FEIR includes all measures proposed in the DEIS/DEIR, and these measures will also be required in the ROD. No additional/newly proposed measures have been required, so the requested tables have not been developed.

Implementation of the measures is required prior to construction.

The text in Section 3.2.2.1 that referred to serious nonattainment has been revised to refer to moderate nonattainment.

- 61-17. Tier 4 engines are not yet required of manufacturers. EPA's Fact Sheet on Non-road Engines, dated August 2012, specifies that the standards will apply only to newly manufactured engines, and that EPA "never requires owners to retire their old engines, vehicles, or equipment". Mitigation measure MM-Air-2 already requires the applicant to use non-road equipment that meets Tier 3 standards. Providing an analysis of emissions from equipment that is not yet available, and that the applicant cannot be required to use once it becomes available, would not add anything to the analysis.

In response to public comments, BLM worked with the Applicant to modify its proposed action to reduce the use of grading, disk and roll, and vegetation removal as much as feasible. The Applicant developed a Revised Site Preparation plan which considered areas where grading and disk and roll could be minimized, and proposed a zoned approach to site preparation. This approach has been incorporated into a Revised Alternative 3, which is described in Section 2.3.3, and evaluated in detail in Chapter 4. BLM also considered evaluating a separate alternative that would prohibit the use of grading and disk and roll as part of the construction process, but ultimately decided not to evaluate this alternative in detail. These considerations and rationales are discussed in Section 2.8.3 of the PA/FEIS/FEIR.

The FEIS includes all applicable state and local requirements, which will also be included in the ROD.

- 61-18. The cumulative emissions in Tables 4.2-7 and 4.2-8 were exceedingly conservative in order to present a worst-case scenario. They were based on an inaccurate assumption that all projects would be concurrent. A better estimate of the potential for cumulative emissions is as follows:

- Calnev and Desert Xpress construction may overlap. But the Calnev emissions are spread out over the 230-mile length of the pipeline, and Desert Xpress emissions are also spread out over hundreds of miles of construction area. Only a fraction of these emissions would occur in the area of the Stateline project.
- Molycorp Phoenix, JPOE, ISEGS, and EITP construction will be complete. These projects should be removed from any reasonable list of cumulative construction projects.

- The only project that is likely to have significant overlap in terms of location and timing is Silver State.

Tables 4.2-7 and 4.2-8 have been revised in the PA/FEIS/FEIR to more accurately reflect these issues, and the cumulative emissions are much lower.

With the limited impact to sensitive receptors and PM10 being a more regional problem, the BLM continues to require the most aggressive dust control measures to help reduce the short term construction impacts to air quality. While a phased construction program coordinated with MDAQMD may reduce the potential for exceedance of the PM10 threshold, the area is still in a non-attainment area and will continue to be with or without additions from these short term activities. Additionally, given the large nature and financial output required to develop large scale solar projects, it is unlikely that the cumulative projects listed would occur co-temporally.

The DEIS/DEIR includes a justification of the one-mile and six-mile radius for cumulative air quality impacts in Section 4.2.10.1. In deciding to use this standard, BLM considered whether any past, present, and reasonably foreseeable projects that are just outside the radius would be excluded. That evaluation showed that there are no other projects for a long distance that would be included if the radius were expanded. While there are a number of projects within the six-mile radius, the next closest projects would be almost 30 miles away (and downwind) in Las Vegas, or more than 50 miles to the west. Projects at that distance could not reasonably contribute to cumulative air quality impacts at the project site.

No additional mitigation would be required, based on the comments on the cumulative analysis.

- 61-19. Since the contracting and construction is carried out by the applicant, the BLM has no input into the solicitation and selection of the construction contractors, this comment is duly noted. The BLM will work with the ROW holder in the event the project is approved to include such statements in the solicitations, if the holder provides a review of those documents.
- 61-20. The FEIS includes the update on the ESA Section 7 consultation process. The relevant documents are available on the project website and are included as an additional file on the electronic version of the Final PA/EIS/EIR.

The mitigation and monitoring requirements that resulted from the consultation process with USFWS have been incorporated into the FEIS, and will be included in the ROD.

Mitigation measures to reduce impacts to golden eagles were included in the DEIS/DEIR, including MM-Wild-3, MM-Wild-4, and MM-Wild-11. Additional baseline data, impacts analysis, and applicant-proposed mitigation measures, based on the Bird and Bat Conservation Strategy, has been added to Section 4.22.11 of the PA/FEIS/FEIR. Implementation of these measures would reduce impacts to eagles by reducing the potential electrocution and collision hazards, and by addressing hazards specific to the construction and decommissioning phases of the project. For example, utility lines (both transmission and distribution) can result in electrocution of birds that have a wing-span large enough for the bird simultaneously to contact two conductors or a conductor and

grounded hardware. Therefore, any structures that would allow this to occur pose an electrocution risk. To protect eagles from possible electrocution, APLIC recommends a horizontal separation of 60 inches and a vertical separation of 40 inches between phase conductors or between a phase conductor and grounded hardware. The design and maintenance of separations in accordance with APLIC guidelines would render unlikely the potential for Stateline project electrocution impacts to eagles.

NEPA does not require an EIS to explain how project approval would comply with other laws; instead, an EIS documents the agency's consideration of the environmental consequences of a proposed action before making a decision on that action. Compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act imposes separate obligations, independent of the NEPA process.

The no-net-loss standard is proposed in the Service's February 18, 2011, Notice of Availability of the Draft Eagle Conservation Plan Guidance (76 FR 9529-01), the draft guidance itself (USFWS 2011c), and the related Fact Sheet (USFWS 2011d). As explained in the summary of the NOA, "The Guidance provides recommendations for agency staff and developers to use an iterative process to avoid and minimize negative effects on eagles and their habitats resulting from the construction, operation and maintenance of *land-based, wind energy facilities* in the United States" (76 FR 9529-01, emphasis added). The Stateline project is not a wind project, and the draft guidance has not yet been adopted. For these reasons, the BLM has not applied the draft guidance, including the proposed no-net-loss standard, to this project. Also, unlike the CDCA Plan's requirement for compensatory mitigation for desert tortoise, the Plan has no provision allowing BLM to require compensatory mitigation for golden eagles.

A description of the manner in which avian protection was considered in power line design, and referencing use of the Suggested Practices for Avian Protection on Power Lines: State of the Art in 2006 Manual, was provided in the Applicant's Bird and Bat Conservation Strategy. This information has been added to Section 4.22.3.1 of the PA/FEIS/FEIR.

Section 4.3.10 of the DEIS/DEIR discussed wildlife movement in response to future climate change scenarios.

- 61-21. In support of the analysis, available wildlife habitat in the Ivanpah area was calculated for the desert tortoise. The assessment provided in Table 4.22-7 shows that these projects would cumulatively affect about 18,000 acres, or 6.4 percent of habitat for desert tortoise in the Ivanpah area. In contrast, more than 250,000 acres in the area is Federal land that is specifically protected from future development. It is agreed that there are limitations on the amount of privately held land available to be used for additional compensatory mitigation in the local area, but this is due to the fact that the vast majority of available habitat in the area is already held by the Federal government and specifically protected from future development. In fact, the BLM's Proposed Action, while authorizing about 2,100 acres of land for the solar development, would also add protection to more than 23,000 acres of land which is currently available for development.

The components of the compensatory mitigation for the desert tortoise are discussed within the text of mitigation measure MM-Wild-8. The 3:1 ratio is composed of BLM's

1:1 requirement in Category 1 habitat pursuant to the Northern and Eastern Mojave (NEMO) amendments to the CDCA Plan, and the CDFG's 2:1 requirement. This ratio is mandated by the NEMO Plan, and is therefore the same as required for other projects in the NEMO area.

The time table to provide compensatory mitigation has been clarified in the PA/FEIS/FEIR and requires the Applicant to satisfy the compensation requirements no more than 18 months after the start of project ground-disturbing activities.

The mechanisms and conditions to be applied to future compensatory lands will be in accordance with the requirements of the CDCA Plan and FLPMA for the BLM portion of the compensation, and in accordance with the SB34 Advance Mitigation Land Acquisition Grants Program for the CDFW portion. Both of these legal mechanisms allow for payment of in-lieu fees as a means to comply with compensatory mitigation requirements. SB34 requires that any lands acquired be protected in perpetuity, but does not require land acquisition.

- 61-22. Potential climate change affects to groundwater availability are a moot point since the project's groundwater use would only occur during the initial construction period. Information on potential climate change impacts to stormwater flows and sensitive species have been added to the text of the PA/FEIS/FEIR.
- 61-23. The DRECP is not scheduled to be completed until later in 2013. Because the DRECP process remains underway, it does not govern the BLM's decision-making efforts for the Project.
- 61-24. Updated information on the status of formal tribal consultation has been added to Section 5 of the PA/FEIS/FEIR.

Letter 62 – Response to Comments from Defenders of Wildlife, Center for Biological Diversity, Natural Resources Defense Council, and Sierra Club

- 62-1. The map showing a proposed desert tortoise avoidance alternative recommendation has been reviewed by BLM, and has been considered, along with many other alternatives, in the development of the project boundaries in the PA/FEIS/FEIR.

Letter 63 – Responses to Comments from Defenders of Wildlife, Center for Biological Diversity, Natural Resources Defense Council, and Sierra Club

- 63-1. The agency agrees with the comment's statements regarding the biological resources that are present, and the stated impacts (including habitat loss, exclusion of tortoises and other species from the site, and habitat fragmentation). The species mentioned are acknowledged to be present, and the impacts discussed are the same as those disclosed in Sections 4.17 and 4.22 of the DEIS/DEIR.
- 63-2. The comment regarding the format of the document is noted.
- 63-3. The agency appreciates that the efforts to develop alternatives that reduce impacts to wildlife and vegetation were recognized by the commenters.

The development of alternatives considers impacts to all resources, not just biological receptors. Some potential configurations, such as the one suggested in the comment, reduce biological impacts, others reduce cultural resource impacts, and others reduce conflicts with Waters of the United States. While the area closer to Ivanpah Dry Lake has fewer biological resources, it also has increased cultural resource and water quality impacts, as well as increased flood risk to the facility due to standing water in the Dry Lake.

The PA/FEIS/FEIR considered two project configurations, Alternatives 2 and 4, which increase the width of the corridor to the north. The PA/FEIS/FEIR also included a configuration, Alternative 3, which would increase the width of the corridor to the west. In addition to these action alternatives, BLM considered an alternative proposed during scoping to expand the boundaries of the Ivanpah DWMA for further protection of the desert tortoise, and included expansion as a component of all action alternatives. Therefore, reasonable methods to avoid impacts to desert tortoise, and to provide additional protections for desert tortoise, have been designed into all of the alternatives considered.

In addition, as discussed in Section 2.1.1, BLM's NEPA Handbook requires consideration of alternatives with respect to their ability to meet the purpose and need, and to be technically or economically feasible. The reduction in the acreage proposed by the commenter would result in a reduction in the generating capacity of the proposed facility such that it would no longer meet the applicant's objectives, and would have a reduced ability to meet other renewable energy and greenhouse gas reduction goals.

- 63-4. The description of the modification of the DWMA boundary in Section 2.2.2, and the description of Alternative 6 in Section 2.5.1, have been revised to clarify that Alternative 6 would include the entire Project Study Area within the boundaries of the modified DWMA. By making this clarification, Alternative 6 effectively considered designation of the entire remainder of the area west of Interstate 15 as being included within the Ivanpah DWMA.
- 63-5. See Common Comment Response Number 1.
- 63-6. The commenter does not provide any information on off-site alternatives that are feasible. See Common Comment Response Number 1 for information regarding BLM's consideration of brownfield sites and non-Federal land alternatives.
- 63-7. See Common Comment Response Number 1.
- 63-8. The comment fails to acknowledge the enormous amount of tortoise habitat in Ivanpah Valley which has been permanently protected from further development. As discussed in Section 4.22.10.4 of the DEIS/DEIR, the analysis demonstrated that the cumulative projects would impact up to 15 percent of the tortoise habitat in Ivanpah Valley. Most of the remainder of the habitat is currently protected from any further development by being designated as part of the Mojave National Preserve, Ivanpah DWMA, or other wilderness areas or ACECs. If the modification of the Ivanpah DWMA boundary, which would add an additional 23,000 acres to the protected area, is implemented, then the remaining 85 percent of the habitat in the valley would be permanently protected from further development.

The letter has been reviewed, and will be considered in BLM's ultimate Record of Decision.

- 63-9. The comment is incorrect in stating that the 1994 Desert Tortoise Recovery Plan specified a population threshold of 5,000 individuals, and that the Regional Assessment indicated that the desert tortoise population located west of I-15 "may not persist" because the population estimate is below 5,000.

First, the Regional Assessment erred in stating that the Recovery Plan specified a minimum genetically effective population size of 5,000 adults. The 1994 Recovery Plan, acknowledging great uncertainty in the estimate, actually stated that a "minimally viable population of desert tortoise from genetic considerations should probably contain at least 2,000 to 5,000 adult animals" (see Recovery Plan page 32).

The second issue is that the population estimate in Appendix B of the Regional Assessment only estimated the population within Ivanpah Valley, and did not account for connectivity outside of Ivanpah Valley. The population range for Ivanpah Valley alone, as estimated in the Regional Assessment, was 814 to 5,671 tortoises, which brackets the Recovery Plan's 2,000 to 5,000 viable population estimate. Considering connectivity through Stateline Pass, Cima Dome, and possibly other connections, it would not be appropriate to consider the Ivanpah Valley population on its own. Appendix B of the Regional Assessment specifically stated that a determination of an appropriate population size for the study area was outside of the scope of their assessment.

The statement that the Regional Assessment cautioned that the long-term effects of cumulative and planned projects in the study area could not be determined is not accurate. The Regional Assessment made no such statement. The Study did recommend field studies to assess the viability of linkages. The Study also quantified habitat loss, and evaluated the impact of the projects on both external and internal connectivity. However, it made no statement regarding long-term effects.

The Nussear (2009) model did not designate habitat quality using terms such as "high value". It is more accurate to discuss those model results in terms of the Habitat Potential Index Value, which was done in the DEIS/DEIR. The DEIS/DEIR disclosed that the model indicated the presence of habitat, and evaluated the acreage of habitat affected based on the model (see Table 4.22-8).

The proposed Stateline facility was identified as a pending application in Table B-2 of the Solar PEIS, so the facility is not subject to the new program elements adopted in the Final Solar PEIS.

Appendix D of the PA/FEIS/FEIR evaluates the relevance and importance criteria for the nominated area located west of Interstate 15 in the southern Ivanpah Valley. The white-margined pestemon was not identified as a resource meeting the relevance and importance criteria in this area. Whether it was identified in separate analyses of other portions of the Ivanpah Valley is not relevant. The analysis does conclude that the desert tortoise meets both the relevance and importance criteria, and this conclusion resulted in analysis of the expansion of the Ivanpah DWMA in the PA/FEIS/FEIR.

Cumulative loss of desert tortoise habitat, individuals, and connectivity were all analyzed within Section 4.22 of the PA/FEIS/FEIR. BLM agrees that the connectivity is

dependent on the size and quality of linkages, which is why these factors were specifically evaluated in both the Regional Assessment and the PA/FEIS/FEIR.

- 63-10. The BLM, both in Nevada and California are engaged in regional planning efforts to address wider concerns related to regional issues, especially the impacts and conservation measures to be implemented with respect to the Desert Tortoise. The BLM has required two different analyses of regional connectivity in the Ivanpah Valley, one is the NatureServe report generated to reflect the known issues and connectivity within the Ivanpah Valley, and a more project-focused assessment. While neither of these can fully examine the larger regional context, the BLM continues to work on addressing issues of habitat protection. In response to the request to postpone the permitting of projects in the valley, the BLM is tasked with reviewing them within the context of their actions, thereby limiting the ability to review at a more regional level.
- 63-11. The description of the modification of the DWMA boundary in Section 2.2.2, and the description of Alternative 6 in Section 2.5.1, have been revised to clarify that Alternative 6 would include inclusion of the entire Project Study Area within the boundaries of the modified DWMA. By making this clarification, Alternative 6 effectively considered designation of the entire remainder of the area west of Interstate 15 as being included within the Ivanpah DWMA.
- 63-12. The Regional Study, the PA/FEIS/FEIR, and other recent tortoise studies have all led to BLM's consideration of the expanded DWMA, which is the requested conservation plan to sustain desert tortoises in Ivanpah Valley, especially on the west side of I-15. These studies have determined that the project size and location, in combination with the expanded DWMA, are consistent with the long-term presence of tortoises in the area. The Regional Assessment did not conclude that the long-term effects of cumulative and planned projects in the study area could not be determined.
- 63-13. It is correct that the 1994 Tortoise Recovery Plan proposed the project area (part of the Northern Ivanpah Valley Unit) to be included in the proposed Ivanpah DWMA. It is also true that BLM has designated tortoise areas as ACECs partially in response to DWMA recommendations from USFWS. However, the 1994 Recovery Plan also states, on Page ii, that their recommendations are general areas, and specific boundary delineation should be accomplished by land management agencies in close coordination with the U.S. Fish and Wildlife Service and State wildlife agencies. In 1994, USFWS also designated critical habitat for the desert tortoise, and chose not to designate the Northern Ivanpah Valley Unit. Based on that decision, and other factors, BLM, in coordination with USFWS, chose not to designate the Northern Ivanpah Valley Unit as part of the DWMA in the 2002 NEMO Plan amendments.
- 63-14. Most of Stateline Pass is already protected from future development by its inclusion in the Stateline Wilderness Area. The only unprotected part of Stateline Pass is the road which passes through it, and which is too narrow to accommodate any development. The proposed expansion of the Ivanpah DWMA would add protections for the tortoise to the remainder of the Pass. The two designations effectively prohibit further development in Stateline Pass.

Culverts are already in place under Interstate 15, as discussed in the Regional Assessment

report and the DEIS/DEIR. The effect of the project on the ability of tortoises to use these culverts was analyzed in DEIS/DEIR Section 4.22.3.1, on Page 4.22-14. The USFWS and the BLM are working to gather information on the possibility of increasing connectivity via culverts and other opportunities with relation to I-15. However, those measures will be reviewed in the context of the BO and will be implemented per the findings in that document.

- 63-15. Section 4.6.3 of the PA/FEIS/FEIR provides a 19-point, resource-by-resource analysis of the conformance of the proposed action with the MUC Class L designation.
- 63-16. The ISA recommendations have been reviewed. The proposed translocation plan is not out of conformance with those recommendations. Those recommendations do consider translocation as a last recourse for unavoidable impacts, stress that translocation alone cannot be considered full mitigation for the impact, and recommend that translocation be considered as an experiment in long-term management and monitoring. These recommendations have been, and will continue to be, considered by BLM in its ROW decision. Should the ROW be approved, the proposed translocation would be necessary to address the unavoidable impact of the displacement of the individuals within the project footprint. As discussed in Section 4.22 of the PA/FEIS/FEIR, translocation is not considered to be the only form of mitigation. As discussed in Section 5 of the Translocation Plan, long-term management and monitoring are included as a component of the plan, consistent with the ISA recommendations.

The risks of translocation were discussed in the DEIS/DEIR beginning on Page 4.22-16.

The comment takes the discussion of translocation in the 2011 Revised Recovery Plan out of context. Translocation in that document is not discussed in terms of it being a component of mitigation for displaced tortoises. Instead, translocation is discussed as a tool to be used to achieve Strategic Element 3: Augment Depleted Populations through a Strategic Program. Thus, the discussion does not relate to what to do with tortoises displaced by a development project, but to the wider goal of deliberately translocating tortoises in order to augment depleted populations. The comment's reference to a scientifically rigorous approach is not relevant to the question of translocation from development projects. Note also that the Revised Recovery Plan contradicts other comments regarding the efficacy of translocation (see Response to Comment 63-23). On Page 36, the Revised Recovery Plan addresses objections made to translocation, but concludes that "... desert tortoises do appear to be suitable candidates for translocation. . .". The document goes on to say that translocation should not be abandoned, but rather that focus should be placed on reduction to threats which impact all tortoises, whether translocated or not.

As described in Section 2.1 of the Desert Tortoise Translocation Plan, the plan was developed using the USFWS Plan Development Guidance of 2011. The subsequent analysis included tortoise density surveys and comparative habitat assessments to determine the number of tortoises that could be introduced without exceeding the maximum density limit in the 2011 USFWS guidelines. That analysis included the presence of the tortoises translocated from Ivanpah SEGS. The results of that analysis were reported on Page 3.22-10 of the DEIS/DEIR, and concluded that, even with the Ivanpah SEGS tortoises, the site could still support the addition of 51 tortoises.

The information that the Perimeter Recipient site is also the location of the proposed Desert Xpress has been added to the cumulative analysis in Section 4.22.10 of the PA/FEIS/FEIR.

The statement that the proposed translocation sites are not protected is incorrect. The East Lake site is already included within the existing Ivanpah DWMA. The Perimeter and Stateline North sites would be included in the expanded Ivanpah DWMA, if that action is approved.

The agency appreciates the information provided in Moilanen and others (2009) and Norton and others (2008). The compensation ratios are established in state law and in the NEMO amendment to the CDCA Plan, which govern the compensation requirements that can be placed on the applicant.

The agency agrees that the 3:1 compensation ratio results in net loss of habitat for the tortoise, and this net loss is equivalent to the acreage of the project site, or about 2,100 acres. This impact is discussed through PA/FEIS/FEIR Section 4.22.3.1. The proposed 5:1 ratio would also result in a net loss of the same amount of habitat acreage. Increasing the compensation ratio would not affect the acreage of the net loss of habitat.

63-17. Based on this and other similar comments, information on the desert kit fox has been added to Sections 3.22.1 and 4.22.3.1 of the PA/FEIS/FEIR.

63-18. The McCrary article addressed bird collisions with mirrored heliostats, which are specifically designed to be as reflective as possible, and not with PV panels, which are designed to be as absorptive as possible. McCrary acknowledged that avian collisions are an inevitable by-product of almost all man-made structures, and provided references suggesting that reflective surfaces are more prone to such collisions than non-reflective surfaces. However, the article does not make an attempt to incorporate configuration into the analysis. It is clear that vertical reflective surfaces, being aligned perpendicular to the maximum velocity of a flying bird, would be more likely to be struck, and also more likely to cause injury or mortality, than flat or tilted surfaces. McCrary's suggestion was that power tower projects should not be sited in close proximity to open water. However, he made no recommendation of distance.

Given the fact that the PV panels are designed to be non-reflective, and are tilted so that they do not present a vertical mirrored surface, it is expected that the potential for fatal collisions with PV panels would be insignificant compared to the potential associated with vertical surface such as the mirrored sides of buildings.

63-19. The DEIS/DEIR provides substantial baseline data relative to special status bird species, as identified in three years of point counts. The document quantifies observations of golden eagle, raven, prairie falcon, peregrine falcon, northern harrier, and burrowing owl. Appendix C of the BRTR lists all other species that were observed as being present in the surveys. Impacts were evaluated for other species which were not observed, but for which potential nesting habitat is present. Additional baseline data and impacts analysis, based on the applicant's Bird and Bat Conservation Strategy (BBCS), has been added to Section 4.22.3.1 of the PA/FEIS/FEIR.

63-20. The number of individual burrowing owls identified in surveys has been added to Section 3.22 of the PA/FEIS/FEIR. Specific mitigation measures for the burrowing owl were

provided in the applicant's BBCS, and those have been added to Section 4.22.11.1 of the PA/FEIS/FEIR. These measures describe the duration, avoidance, and buffers requested in the comment. In reviewing the 2012 Staff Report, CDFG states that burrowing owl exclusion and burrow closure are not recommended where they can be avoided. In cases when owl exclusion cannot be avoided, CDFG recommends that a Burrowing Owl Exclusion Plan be developed and approved by the applicable local CDFG office. Mitigation Measure MM-Wild-16 of the PA/FEIS/FEIR requires that a Burrowing Owl Mitigation Plan is prepared in consultation with CDFG. Thus, while not required to do so, the EIS generally meets with the requirements of the 2012 Staff Report.

- 63-21. It is agreed that the precise number of territories that may overlap the project site cannot be completely determined without capture and tagging studies. However, such studies are outside of the scope of an EIR/EIS. The applicant's Bat and Bird Conservation Strategy used an estimated territory size of five miles, and that information will be considered by the USFWS in determining the need for a take permit. Section 4.22.3.1 of the DEIS/DEIR acknowledged that the project site is foraging territory that would be eliminated.

The cumulative impact to the amount of golden eagle foraging habitat in the area was discussed in Section 4.22.10.4 of the DEIS/DEIR. Specific mitigation for golden eagle impacts, as proposed in the applicant's Bird and Bat Conservation Strategy, has been added as APM-Wild-5 in the PA/FEIS/FEIR. In addition, the text of Section 4.22.3.1 has been revised to address the potential for take of golden eagle under the Bald and Golden Eagle Protection Act.

- 63-22. Impacts to MBTA and other bird species are addressed beginning on page 4.22-18 of the DEIS/DEIR. Mitigation measure MM-Wild-11 addressed the requirement to implement the applicant's Bird and Bat Conservation Strategy. The specific applicant-proposed measures from the BBCS have been added to the text of the PA/FEIS/FEIR as mitigation measure APM-Wild-5.
- 63-23. Section 4.14 of the DEIS/DEIR discussed project impacts to biological soil crusts, including discussing how the removal of crusts increases the potential for water and wind erosion. Section 4.2 of the DEIS/DEIR quantified vegetative uptake of CO₂ as part of the analysis of greenhouse gas emissions.
- 63-24. The comment's reference to the adjacent project (Ivanpah SEGS) being required to leave vegetation in place is not accurate. The low-impact development design and manner in which stormwater flows are addressed on that project were proposed by the applicant for that project. BLM required the applicant for that project to demonstrate how stormwater flows would be managed to avoid hydrologic impacts, but did not direct the applicant to use a particular method to achieve that requirement.

The development of alternatives considers impacts to all resources, not just biological receptors. Table 4.17-1 of the PA/FEIS/FEIR compares the number of individual occurrences of each special status plant species affected by each action alternative. As shown in Figure 3.17-2, two alternatives that avoided impacts to northern area, Alternatives 2 and 4, were evaluated in detail in the PA/FEIS/FEIR. That figure also shows that no other configuration of action alternatives that would avoid special status

plants within the project study area is possible.

63-25. Information on creosote rings has been added to the text of the PA/FEIS/FEIR.

63-26. The referenced plans are available on the project website and are included as additional files on the electronic version of the Final PA/EIS/EIR.

63-27. With respect to the desert tortoise, the DEIS/DEIR identified and analyzed alternative site configurations which were specifically developed to minimize impacts to connectivity corridors. Section 2.3.3 of the DEIS/DEIR discusses how Alternative 3 was developed by BLM specifically to increase the area available for connectivity between the facility, Metamorphic Hill, and the Clark Mountains. Section 4.22.4.1 of the DEIS/DEIR discusses how the configuration of Alternative 2 would increase the area available for connectivity between the northern boundary of the facility and the Clark Mountains.

With respect to bighorn sheep, the DEIS/DEIR acknowledged that the project site could potentially be used as a migratory corridor. However, there is no direct evidence that the site is actually used as a corridor, or regarding the importance of the corridor. Therefore, impacts are speculative, and mitigation is not required. However, as with the desert tortoise, the discussions of the width of the corridor in the various action alternatives are also relevant to bighorn sheep, if they are present. None of the action alternatives completely close off the corridors.

63-28. The DEIS/DEIR acknowledges the impact on washes and ephemeral streams on the alluvial fan. Sections 4.14, 4.17, and 4.19 all discuss the important ecological function of these streams, quantify the impact, demonstrate how the applicant's stormwater management design would minimize the impacts, and present additional mitigation measures to avoid or reduce adverse impacts. With respect to the specific issues raised:

- The project would not interrupt the hydrologic connection between the upstream areas and downstream areas;
- The applicant has designed stormwater basins to accomplish the goal of stream energy dissipation, and the agency has reviewed their hydrologic modeling to evaluate the sufficiency of the design;
- Mitigation measures MM-Water-4 and MM-Water-5 have been required to ensure no disruption of current exchange between surface and subsurface water;
- Mitigation measures MM-Water-4 and MM-Water-5 also support continuation of any current groundwater recharge. There are no groundwater discharges in the area of the project which could reasonably be affected by the proposed action;
- The applicant's stormwater management system, reviewed by the agency, is designed to maintain sediment transport downstream of the facility at current levels;
- By having the objective of maintaining water and sediment flows at the downstream boundary of the facility, the project would also maintain current levels of nutrient storage and cycling;
- The document acknowledges that the wildlife habitat currently supported in on-

site intermittent drainages would be eliminated. This removal of habitat would be mitigated, in part, by the compensatory habitat acquisition required in mitigation measure MM-Wild-8;

- The document acknowledges that on-site vegetation communities that stabilize the stream banks and provide habitat would be eliminated. By implementing their stormwater management system, the function of on-site vegetation in maintaining stream banks would not be needed. There would be no modification of off-site stream banks or habitat; and
- Groundwater and surface supply would not be affected by the elimination of the on-site drainages. Groundwater recharge would be maintained through implementation of mitigation measures MM-Water-4 and MM-Water-5. Surface water flows would be maintained at current levels by the stormwater management system. Sediment basin would support water quality filtering by ensuring that no additional sediment is added to the downstream sediment budget.

63-29. The PA/FEIS/FEIR text has been revised to identify the closest spring to the project area, and evaluate the potential for the cumulative projects to affect that spring. The analysis includes all water withdrawals over the life of the project. Because that spring is 4 miles away from the groundwater production wells, there is no reasonable scenario in which the limited authorization of water use for the project could affect it. Therefore, the project cannot cause any impact to any reserved water rights, or the lands on which those rights exist.

63-30. BLM's ROW grant would specify the terms of authorized groundwater use, which would be limited to the volumes and durations analyzed in the PA/FEIS/FEIR.

63-31. As discussed in Section 4.3.1 of the DEIS/DEIR, the analysis of greenhouse gas (GHG) emissions is consistent with the direction provided to Federal agencies in the Council on Environmental Quality's Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions dated February 18, 2010. That guidance indicates that a quantitative and qualitative analysis, including consideration of mitigation measures, be conducted for any project that has direct emissions over 25,000 metric tons of CO₂-eq per year. Therefore, a more detailed analysis of life cycle emissions is not required.

The reduced uptake of carbon due to vegetation and soil removal was quantified in the analysis in Section 4.3.3.1 in the DEIS/DEIR.

Construction activities that would generate GHG emissions are discussed in Section 4.3.3.1 of the DEIS/DEIR. Those emissions are quantified in Table 4.3-1.

63-32. Mitigation measures MM-Air 2 and MM-Air-3 already require measures for the use of newer model equipment and other operational measures to minimize air emissions. Specifically, MM-Air-2 require the use of alternative clean fuel technology such as electric, hydrogen fuels cells, and propane-powered or compressed natural gas equipment during construction, and a similar requirement for alternative-fueled equipment is required in mitigation measures MM-Air-3. These measures would also achieve the objective in using the best available equipment to minimize GHG emissions. Because the

project's GHG emissions are so small compared to other sources and to the 40 CFR Part 98, Mandatory Reporting of Greenhouse Gases Rule (USEPA requires mandatory reporting of GHG emissions for facilities that emit more than 25,000 metric tons of CO₂-eq emissions per year), no further mitigation is necessary.

Section 4.2.3.1 of the DEIS/DEIR acknowledges that the earthwork associated with site construction would result in PM₁₀ emissions. The mitigation measures proposed provide specific requirements which are enforceable both by MDAQMD and the BLM. Mitigation measures MM-Air-1 (for construction) and MM-Air-3 (for operations) require the applicant to minimize fugitive dust emissions due to wind erosion during both the construction and operation phases of the project. These include measures to pave or stabilize access and construction roads; limit vehicle speed on unpaved areas; cover soil storage piles and disturbed areas; and use of wind control erosion techniques, such as windbreaks, and application of water and/or chemical dust suppressants. Measure MM-Air-1 requires submittal of the Air Quality Construction Management Plan to the MDAQMD 60 days in advance of construction. BLM, County, and MDAQMD review of the plan will include consideration of the efficacy of dust control measures used on previous construction sites. Section 4.2.3.2 of the DEIS/DEIR acknowledges that, even with mitigation measures, temporary significant and unavoidable impacts would occur.

The comment stating that the DEIS/DEIR does not address the use of dust palliatives is incorrect. Although the term "palliatives" is not widely used in the document (the document more commonly refers to soil stabilizers), the use of such stabilizers as part of the proposed action is discussed throughout the document, and is specifically required in mitigation measures MM-Air-1 and MM-Air-3. The Applicant's Air Quality Construction Management Plan specifies the proposed soil stabilizers to be applied to soil disturbed during Project construction, as required by MDAQMD Rule 403.2. The proposed stabilizers are listed in Table 2-1 of the DEIS/DEIR, and were discussed, where applicable, throughout the description of the Proposed Action in Section 2.1.

- 63-33. The GHG emissions associated with construction and decommissioning are both acknowledged in the quantification of GHG emissions in Section 4.3.3.1 of the DEIS/DEIR.

Letter 64 – Responses to Comments from Audubon California, California Native Plant Society, Center for Biological Diversity, Defenders of Wildlife, National Parks Conservation Association, Natural Resources Defense Council, Sierra Club, and The Nature Conservancy

- 64-1. Although received during the public comment period, the letter does not provide specific comments on the Stateline DEIS/DEIR. The request to suspend the consideration of the Stateline right-of-way application until a coordinated conservation plan can be developed is noted. See Response to Common Comment Number 6.

Letter 65 – Responses to Comments from Tom Driggs, on behalf of the Primmadonna Company

- 65-1. The comment requesting a design modification that would address Primmadonna's concerns about impacts to their right-of-way is noted, and was considered by BLM in the PA/FEIS/FEIR.
- 65-2. The exact timing of the construction cannot be determined until the environmental review process is completed, and only if a ROW is granted. The text of Section 2.1.3.2.1 of the PA/FEIS/FEIR has been modified to stress that installation of tortoise fencing would be among the first preconstruction activities, as it is required for security and tortoise protection before any other construction activities can take place. Therefore, it can be assumed that fencing would occur shortly after the applicant receives a Notice to Proceed.
- 65-3. Additional information regarding how First Solar would use the route and gates to access the solar arrays has been added to Section 2.1.3.1 of the PA/FEIS/FEIR. The existing road would continue to be a ROW authorized for use by Primmadonna. Any portions of the route used by First Solar would also be assigned under a separate ROW to them, and they would be responsible for payment of rent and maintenance on that portion of the route.
- 65-4. Additional information regarding how First Solar would use the gates and the road crossing has been added to Section 2.1.3.1 of the PA/FEIS/FEIR. An evaluation of the potential for this use of the crossing to affect Primmadonna's pipeline has been added to Section 4.6.5 of the PA/FEIS/FEIR.
- 65-5. Additional information regarding how First Solar's facilities would cross the access road has been added to Section 2.1.3.1 of the PA/FEIS/FEIR.
- 65-6. The rent for the ROW is based on the acreage of use, and the ROW is not exclusive (i.e., the same acreage can be assigned to two separate users at the same time). Therefore, the project's use of the road would not reduce the rent payment associated with Primmadonna's use of the road, since Primmadonna would continue to use the same acreage. First Solar's use of portions of the road would be allocated to them separately, and they would make a separate rent payment. If Primmadonna were to use a re-directed road that is longer, and would therefore have a greater acreage requirement, the associated rent payment would be higher than the current payment.
- 65-7. Additional information on the relationship of the Stateline facilities to the Primm wells and pipeline has been added to Section 2.1.3.1 of the PA/FEIS/FEIR.
- 65-8. The comment is incorrect in referring to 1,900 ac-ft per year. Section 2.1.3.1 of the PA/FEIS/FEIR discusses the water use, which would be 1,900 ac-ft over the 2 to 4-year term of the construction period. That section also estimates peak daily water demand at 1.5 million gallons per day. In the groundwater modeling, which is summarized in Section 4.19.3.1, the conservative assumption was made that the water use would occur over a period of two years, and that 55 percent of the water use (1,045 ac-ft) would occur within the first year. Therefore, the maximum water use that would occur would be 1,045 ac-ft within the first year. That is equivalent to an average of about 940,000 gallons per day, with the peak use of 1.5 million gallons per day.
- 65-9. Section 4.19.3.1, specifically pages 4.19-6 and 4.19-15, of the DEIS/DEIR, summarizes the results of the applicant's groundwater modeling of the effect of pumping on aquifer

water level. That analysis specifically references the expected drawdown in the wells operated by Primmadonna. The discussion also specifies aquifer drawdown levels that would trigger a requirement to access water from the secondary well.

The effect of pumping on water quality would be impossible to quantify, but it was discussed in detail on Pages 4.19-13 through 4.19-14. The PA/FEIS/FEIR specifically analyses observations of water quality impacts associated with groundwater withdrawal in the area, and concluded that water withdrawal from the proposed primary well could impact groundwater quality. Mitigation measures MM-Water-2 and MM-Water-3 describe how both aquifer levels and water quality would be monitored, and specify triggers for ceasing water production and accessing water from the secondary well. BLM and the County specifically required the applicant to propose a different location for their proposed secondary well in order to avoid any potential groundwater quality deterioration.

- 65-10. The comment does not provide information on the permitted pump rate. BLM review indicates that permitted rates are based on consumptive use, so permitted withdrawal rates are not available. A statement has been added to Table 3.19-3 indicating that 860 ac-ft/yr is the average pump rate over a 16 year period. Additional information indicates that the average over 17 years from 1996 to 2012 was 801 ac-ft/yr. Therefore, use of the 860 ac-ft/yr estimate is a conservative analysis.
- 65-11. The required depth for the monitoring wells was re-assessed based on a change in their proposed location, and has been revised. The new proposed depth has been incorporated into the PA/FEIS/FEIR at Section 2.1.3.1 and 4.19.3.1.
- 65-12. As shown on Page 4.19-6 of the DEIS/DEIR, the comment is correct in assuming that drawdown levels would be higher under the secondary well scenario than under the primary well scenario. In either case, BLM and the County have determined that the level of drawdown is acceptable and would not present an adverse impact. The commenter has not provided information on material impacts which could occur to their operations, and has not provided information to support the suggestion of two feet of drawdown as a maximum allowable level.
- 65-13. The text of the PA/FEIS/FEIR has been corrected to refer to the correct drawdown value, which is approximately 3.9 feet. BLM and the County have determined that the level of drawdown is acceptable and would not present an adverse impact. The commenter has not provided information on material impacts which could occur to their operations, and has not provided information to support the suggestion of two feet of drawdown as a maximum allowable level.
- 65-14. The text of the PA/FEIS/FEIR has been revised to remove the phrase “act as triggers for corrective action” or “response action” from the referenced text on Page 4.19-5, as well as in the remainder of Section 4.19. The referenced memo from Mr. Reeder did propose to establish significance criteria, but only to trigger additional analysis to determine if the identified effect were significant. The memo did not make any recommendations for corrective actions to be taken.
- 65-15. The statement in the DEIS/DEIR, page 4.19-7, that the mitigation measures would help insure that basin overdraft and offsite drawdown of more than five feet do not occur is

accurate, and has not been modified. Although the mitigation measures do not specify an offsite water source, they do require monitoring to verify the accuracy of the groundwater model predictions, measures to maximize recharge, and implementation of water conservation measures in the event of a drought. Given the conservative assumptions that went into the groundwater model and the temporary nature of the water use during construction, development of mitigation measures to address the very unlikely scenario of 5 feet of drawdown for more than a year are not necessary.

- 65-16. The comment that the parameters used in the model may not correctly simulate actual drawdown is not supported by any specific observations. The referenced text of the Groundwater Availability Report notes that some of the ENSR parameters were used, but that others were found to be unreasonable, and were replaced with different parameters. This indicates that the modelers did not simply adopt someone else's parameters blindly, but used professional judgment to determine the reasonableness of each parameter. The comment does not specify which parameters could be inaccurate, so no further response is possible.
- 65-17. BLM and the County agree that degradation of water quality is a concern, as stated at the top of Page 4.19-13 of the DEIS/EIR. That subsection goes on to present an analysis of the historical groundwater quality issues that have occurred in the project area. In response to these concerns, BLM and the County required the applicant to revise the location of the secondary well, which had originally been proposed to be much closer to Primmadonna's production wells. However, BLM and the County disagree that the primary source of concern for degradation of groundwater quality is the secondary well. Because the source of groundwater degradation is likely to be Ivanpah Dry Lake, the main concern for mobilizing saline groundwater would be associated with water withdrawal in close proximity to the Dry Lake. This was the rationale for requiring the applicant to consider siting their secondary well a greater distance from the Dry Lake. The distance of the secondary well from the Dry Lake, as well as the monitoring requirements to identify effects long before they could reach the Primmadonna wells, are expected to be protective of water quality in the Primmadonna wells.
- 65-18. Section C of the comments regards the applicant's Groundwater Monitoring and Reporting Plan. These comments are not considered as comments on the DEIS/DEIR. However, the applicant has revised their plan based on these comments, and the revised results have been incorporated into the PA/FEIS/FEIR.
- 65-19. Additional information on the relationship of the Stateline facilities to the Primm wells and pipeline has been added to Section 2.1.3.1 of the PA/FEIS/FEIR
- 65-20. The access road that needed repairs is not identified in the comment, and it is not clear how or if this is related to the Ivanpah SEGS solar development. If this is naturally-occurring damage, then it is possible that the project's plan to capture stormwater in basins to slow the flow rate would result in reducing the potential for damage to roads in downstream areas. In any case, the applicant's stormwater modeling indicates that project development would not have an appreciable effect on stormwater flooding or erosion. No further changes have been made to the PA/FEIS/FEIR to require further road improvements.

- 65-21. The schedule for application of dust suppressants cannot be determined in advance. Water and dust suppressants will be applied on an as-needed basis to meet MDAQMD requirements, and the applicant will be held accountable to those requirements. The total amount of water to be used during both construction and operations is discussed in both Section 2.1.3.1 and 4.19.31 of the PA/FEIS/FEIR.

Letter 66 – Responses to Comments from Christina Caro, on behalf of the Laborers International Union of North America (LiUNA) Local 783.

- 66-1. This list of comments summarizes specific comments made in the body of the letter. Responses are provided where the specific comments were made in more detail.
- 66-2. The comment's statement that a conformity analysis of the CDCA Plan's Energy Production and Utility Corridors Element was presented in Appendix D of the DEIS/DEIR is not correct. The evaluation in Appendix D was an analysis of the relevance and importance criteria for ACECs, in accordance with BLM ACEC Manual 1613. The DEIS/DEIR does not make a conformance determination with respect to those criteria. Instead, as shown at the bottom of Page 1-11 of the DEIS/DEIR, a statement of the conformance with these criteria will be placed in the ROD.
- 66-3. As discussed above, the DEIS/DEIR does not present a conformity analysis. However, with respect to the issues raised in this comment, the DEIS/DEIR clearly shows how the project was sited and designed, how alternatives were developed, and how mitigation measures were developed to avoid sensitive resources, such as desert tortoise habitat. Also, an alternative water supply to avoid overdraft of the IVGB aquifer was not proposed because the analysis in Section 4.19 showed that overdraft would not occur.
- 66-4. The evaluation in Section 4.19.3.1, Page 4.19-4, of the DEIS/DEIR, presented and acknowledged the full range of estimates of recharge for the basin. That section also described the specific technical rationale and assumptions for why some estimates were rejected, and some were accepted.
- 66-5. The statement that the modification of the DWMA boundary would adversely impact the existing tortoise population is incorrect. It is correct, as acknowledged in Section 4.22.3.1 and other sections of the DEIS/DEIR, that the proposed solar project would adversely impact both desert tortoise individuals and habitats. However, it is not clear how designation of the remainder of the area as DWMA would have an adverse impact. Instead, as discussed on Pages 4.22-23 and 4.22-24 of the DEIS/DEIR, the modified DWMA boundary would have a beneficial impact by limiting future development in the area surrounding the solar facility, thus preserving connectivity corridors.
- 66-6. Again, the DEIS/DEIR makes no statement that the proposed project is in conformance with criterion #5, and that evaluation will be made in the ROD. However, the project is in conformance with criterion #5. No energy facility will have zero environmental impacts. As discussed throughout the DEIS/DEIR, the project was sited and designed, alternatives were developed, and mitigation is required which would achieve the objective of avoiding environmental impacts whenever possible.
- 66-7. The materials mentioned in the comment are part of the Administrative Record, and are

available upon request. There is no requirement for the Administrative Record to be attached to the document, or to be made available on a project website.

- 66-8. The components of the project which would affect hydrology, site drainages, and sensitive species are described in detail in Section 2.1.3.1 of the DEIS/DEIR. The solar technology used for the Ivanpah SEGS facility and that proposed for Stateline are not the same, and the site locations are different, so a direct comparison of the projects is not relevant. Also, the comment's reference to the system implemented at Ivanpah SEGS as having a minimal impact is the opinion of the commenter, and is not supported by information from the Ivanpah SEGS EIS or the operational experience of Ivanpah SEGS. It is true that Ivanpah SEGS implemented a system in which the site was not graded. However, this was only made possible by the nature of their technology (hundreds of thousands of individual mirrors not connected to each other by support structures), and a mitigation measure that required a substantial depth of installation to avoid erosion impacts. Even with those considerations, the analysis of Ivanpah SEGS concluded that erosion could result in damage to thousands of heliostats, and erosion damage has already occurred during construction. Therefore, a simple comparison of the two different construction techniques does not provide the whole picture.
- 66-9. A description of the water pipelines is provided on Pages 2-6 and 2-7 of the DEIS/DEIS. The text has been revised in the PA/FEIS/FEIR to more clearly describe how pipelines outside the project fence would be buried, and those inside the fence would lie on the surface. Because tortoise would be excluded from the construction zone, they would not be affected by pipelines on the surface within the construction zone. Also, a pipeline height of 6 inches, within the area where tortoises are excluded, would not provide a perch for ravens that could be used to prey on tortoises.
- 66-10. The quoted text has been modified in the PA/FEIS/FEIR to correct the statement that "the area of remaining habitat would be far below the recommended size of a reserve to support a viable population". In fact, the area without any projects is already far below the recommended size. The recommended size of a reserve in the 1994 Desert Tortoise Recovery Plan was 1,000 square miles (640,000 acres). The full size of the western lobe, even without any projects, is about 33,000 acres. Therefore, the western lobe, on its own without any connection to other areas, was already only about 5 percent of the recommended size. Implementation of the project would reduce this to 4.8 percent of the recommended size. Therefore, with respect to the USFWS-recommended reserve size, the statement that the project would not have any substantial effect is correct.
- If the USFWS estimate of 1,000 square miles is accurate, then the characteristic that has continued to support the viability of the western lobe population since the construction of Interstate 15 and Whiskey Pete's is connectivity with outside areas through Stateline Pass. As shown in the DEIS/DEIR, the project would not affect this interconnection. The DEIS/DEIR acknowledges that the project would adversely affect the population of tortoise within the area. However, the comment's conclusion that the population is currently viable, but that the viability would be threatened by the project, is not correct.
- 66-11. The objective of the USFWS 2011 Recovery Plan is recovery and delisting of the tortoise. That Plan proposed Recovery Actions to assist in meeting this objective. Recovery Action #2.9 was to secure lands and habitat for conservation. The action of

requiring compensatory mitigation works to secure lands and habitat for conservation, so the statement that they contribute to recovery is accurate.

- 66-12. The CDCA Plan allows for solar projects to be sited in MUC Limited areas, pending NEPA analysis, and BLM is legally required to consider and evaluate the ROW grant application. The tortoise population and density are factors that BLM will consider in making a final determination.
- 66-13. The comment does not provide information on any specific mitigation measures that should have been applied, but were not. BLM has identified and proposed all reasonable and feasible mitigation measures.
- 66-14. The four quotes discussing impacts to habitat connectivity are all associated with the discussion of the Proposed Action, Alternative 1. The comparison of alternatives in Table 2-8 and in Section 4.22 indicates that other alternatives would have lesser impacts to connectivity. In fact, the text on Page 2-27 clearly states that Alternative 3, which was identified as the agency's preferred alternative, was specifically designed to increase the area available for connectivity.

The comment's statement that the USFWS has estimated that a landscape linkage needs to be at least 1.4 miles wide to maintain connectivity between desert tortoise populations is incorrect. In fact, the referenced document estimates the radius of a tortoise home range to be 1.5 miles, and states that a linkage would need to be 1.4 miles wide to accommodate a single home range. However, the next paragraph in that document goes on to discuss the factors that affect the viability of a connection, and does not mention width as one of the factors. In fact, the Regional Assessment, which is more recent than the referenced USFWS document, considers the 1.4 mile value in their evaluation of the functionality of Stateline Pass. The Regional Study notes the USFWS 1.4 mile hypothesis, but concludes that Stateline Pass, which at only a few hundred feet wide does not meet this standard, is still an area of potentially viable connection. This supports the hypothesis that the other factors discussed by USFWS, besides width, are involved in determining the viability of a connection. Based on the results of the Regional Assessment, and the USFWS discussion of factors affecting connectivity, the comment's disagreement with the DEIS/DEIR conclusions is noted, but the conclusions have not been changed.

- 66-15. Table 1-2 of the DEIS/DEIR specifically lists federal and state Incidental Take Permits as requirements for the project.
- 66-16. The DEIS/DEIR presents and evaluates 11 applicant-proposed mitigation measures, summarizes numerous mitigation measures for other resources that would contribute to protection of wildlife, and then proposes an additional 14 mitigation measures specifically for wildlife. Although it is noted that the commenter does not consider these measures appropriate, the comment does not provide any other specific measures, except for siting the project outside of the Northeastern Recovery Unit. Section 2.8 of the DEIS/DEIR discussed potential siting alternatives, and explained why they are not feasible alternatives. Also, the comment fails to acknowledge that the applicant's siting process, described in Section 2.8.1, was designed to avoid areas set aside for protection of the desert tortoise. The location of the project "precipitously" close to designated critical

habitat is not relevant. The project site itself was evaluated for inclusion in critical habitat and the Ivanpah DWMA, and was not selected for these protections.

There would be no illegal takes that are addressed after the fact. The project would receive an incidental take permit, which would specify an authorized number of takes. If that number were to be reached, the project would be stopped until BLM had re-initiated consultation with the USFWS.

- 66-17. The statements that golden eagles avoid areas subject to anthropological disturbance, but that they are “routinely observed” in the project area on the ISEGS project appear to be contradictory. The information that golden eagles are routinely observed at ISEGS implies that they do not avoid human activity.

The Bird and Bat Conservation Strategy is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR.

The elimination of foraging habitat within the range of an active territory was disclosed as an adverse impact in the DEIS/DEIR. However, elimination of foraging habitat does not constitute take of the species.

- 66-18. The specific applicant-proposed measures from the BBCS, including specific measures for protection of burrowing owls, have been added to the text of the PA/FEIS/FEIR as mitigation measure APM-Wild-5 and MM-Wild-16.

- 66-19. The DEIS/DEIR acknowledges that the project could impact bighorn sheep foraging habitat, narrow the width of movement corridors, and increase stress from human disturbance. However, the fact that these impacts could occur does not, in itself, indicate that an impact will be significant. Although the comment cites information from the Ivanpah SEGS Final Staff Assessment from 2009, the DEIS/DEIR provides more updated information using a habitat evaluation tool developed by the Desert National Wildlife Range. The updated information indicates that the project area is not defined as important bighorn sheep habitat, and therefore appropriately concludes that the potential impact on foraging habitat and movements corridors is less than significant.

- 66-20. The Bird and Bat Conservation Strategy is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR.

The DEIS/DEIR acknowledged that pallid bats could be roosting in rock crevices and burrows within the study area. Information from the Bat and Bird Conservation Strategy has been added to Section 4.22 of the PA/FEIS/FEIR, including applicant-proposed mitigation measures. These include pre-construction surveys to identify bat roosts and, if found, establish exclusion zones.

- 66-21. The CNDDDB maps provided with the comment do not support the comment’s assertion of significant impacts to special status plants as a result of the project. A review of the commenter’s Figure 1 shows that the statement regarding the Mojave milkweed that “more than half of these occurrences are within the project footprint and immediately surrounding area” is technically correct, but only in so far as the reference to the surrounding area. The figure shows the vast majority of the occurrences to the west of the project footprint. Comparison of the project footprint to this map indicates that the project would affect few or none of these occurrences. Similar conclusions can be

reached with respect to the other species for which figures are presented in the comment letter. Figure 2 appears to show that one occurrence of small-flowered androstephium may be affected by the project, while two other nearby occurrences would not be affected. Figure 3 shows no occurrences of desert pincushion within the project footprint, Figure 4 shows no occurrences of Parish's club-cholla within the footprint, and Figure 5 shows no occurrences of nine-awned pappus grass within the footprint.

The BLM Final EIS presented the findings of CEC's Final Staff Assessment for Ivanpah SEGS, and specified that the conclusions were those of CEC. That analysis did conclude that impacts to special status plants would be significant. However, CEC later issued an FSA Addendum evaluating the modified footprint of Ivanpah SEGS (the footprint that was ultimately approved), and specifying additional mitigation measures that included avoidance and transplant of special status plants. Based on those changes, CEC's FSA Addendum concluded that impacts to special status plants would be reduced to less than significant following mitigation. Therefore, the comment that the Stateline DEIS/DEIR conclusion is in conflict with the significance conclusions for Ivanpah SEGS is not correct.

- 66-22. The DEIS/DEIR does not make any unsupported assumption that the special status plants that would be impacted by other cumulative projects would be the same as the proposed project. Table 4.17-6 specifically lists the special status plants associated with those other projects, based on site-specific survey data for those projects, and as reported in the environmental analysis documents for those projects. The fact that the list of species is similar (although not exactly the same) is based on proximity and similarity of habitat, not on any unsupported assumptions.

It is correct that the statement in the DEIS/DEIR that the surrounding undeveloped area, comprising 156,000 acres, is likely to have a similar distribution of special status plants is not supported by survey data from the entire 156,000 acre area, collection of which is not necessary or feasible. However, it is a reasonable assumption based on an examination of survey results from each of the individual projects, and given the similarity of environmental setting. The survey results do show that the distribution of each species on a small scale is heterogeneous, as mentioned in the comment. But the distribution of each species, within the regional context, given the similarity of environmental setting, is likely to be widespread, and that conclusion is supported by the CNDDB maps provided in the comment. The point of that discussion is that the size of the proposed action and other projects is small, relative to the amount of similar surrounding habitat; that each of the projects has been designed, on a micro-scale, to avoid locally-dense occurrences identified in site-specific surveys; and that the remainder of the enormous area is protected from further development. Given these factors, the conclusion that impacts are less-than-significant has not been changed in the PA/FEIS/FEIR.

- 66-23. The statement in the DEIS/DEIR on Page 4.17-10, that mitigation measures (specifically, MM-Veg-3) would reduce impacts to special status plants to less-than-significant has been revised in the PA/FEIS/FEIR. The conclusion of less-than-significant is not based primarily on avoidance and restoration per the mitigation measure, but on the small number of occurrences that are within the project footprint. Although avoidance and transplant are appropriate measures to reduce impacts that do occur, the impact would be

less-than-significant without these measures.

- 66-24. The comment does not provide any evidence to suggest that the project would have a significant impact on the species mentioned. The DEIS/DEIR acknowledged that nesting and foraging habitat exists for some of these species, but the number of actual observations in the Project Study Area during surveys was very low. The applicant's Bird and Bat Conservation Strategy is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR. Additional baseline data, impacts analysis, and applicant-proposed mitigation measures, based on the Bird and Bat Conservation Strategy, has been added to Section 4.22.11 of the PA/FEIS/FEIR. With the very low number of observations, pre-construction surveys, and nest avoidance measures, the conclusion that impacts would be less-than-significant is accurate.
- 66-25. Focused wildlife surveys of the Project area led by a qualified herpetologist failed to detect banded Gila monster. The DEIS/DEIR discusses that habitat may be present on Clark Mountain or Metamorphic Hill, but the project site itself is unlikely to support habitat. Mitigation measure MM-Wild-3 (employee training) and pre-construction surveys for desert tortoise would ensure that, if any gila monsters are present, they would be identified and handled appropriately. It is not clear what additional analysis the commenter would request, given the low probability of occurrence.
- 66-26. The Jurisdictional Delineation document describing the survey methodology has been attached to the PA/FEIS/FEIR as an appendix. Table 4.17-1 clearly shows that 490 acres is the total acreage of jurisdictional waters in the Project Study Area, and then defines the portion of this acreage that is included within the footprint of each alternative. Section 1.0 describes how each of the alternatives represents only a portion of the overall Project Study Area. Therefore, the references to the acreage or number of a resource within the Project Study Area is informational, but does not represent the amount of impact that would occur under any of the alternatives.
- The description of the operation of the basins and the role that alluvial fans play in sediment transfer is accurate. However, the fact that stormwater would be managed does not, by itself, result in a conclusion that impacts would occur in downstream areas. The stormwater protection system is specifically sized to result in no net change to water or sediment flow downstream of the ROW grant area.
- 66-27. The topographic map provided in the comment shows blue-line drainages as mapped by aerial photos, but these have nothing to do with the significance of the drainages in terms of size or stormwater damage potential. The applicant's hydrologic model performs quantitative calculations of the drainages, and clearly documents the role of Metamorphic Hill in directing stormwater to the south, as discussed in the DEIS/DEIR. The applicant's siting process deliberately sited the proposed facility to the north of these drainages to avoid siting within these two major drainages.
- 66-28. The fact that jurisdictional resources on the project site would be impacted is not inconsistent with a statement that measures were taken to minimize these impacts. The deliberate siting of the facility to the north of the North and South Washes, which are shown in the hydrologic modeling to be the most significant drainages in the local area, does constitute a measure to protect and mitigate losses.

Sections 1.4.2.2, 3.17.2.2, and 3.19.2.2 of the DEIS/DEIR describe the process to be followed to obtain a Streambed Alteration Agreement. The process begins with preliminary notification to CDFG during the environmental review process, which is still in progress. Mitigation measure MM-Veg-6 specifically requires the applicant to obtain the permit, and to comply with its requirements. However, the permit cannot be obtained, and the specific final requirements cannot be determined, until the project is approved. That does not mean that the general requirements are not widely known, and the effect of these requirements in reducing impacts cannot be evaluated.

The discussion of the efficacy of wetland mitigation projects in the Ambrose article is based on compensatory mitigation for impacts to riparian wetlands. The jurisdictional waters affected by the proposed action are all ephemeral drainages, and are not riparian wetlands. Therefore, the Ambrose article is not relevant to the proposed action.

- 66-29. The description of the source of groundwater for the basin being precipitation is accurate, and was accounted for in the calculation of the basin groundwater balance in the DEIS/DEIR. The statement that flow may be affected by faults is not supported by any evidence, nor is the potential effect of these faults on the overall groundwater balance calculation discussed in the comment.

The analysis of recharge rates, beginning on Page 4.19-3 of the DEIS/DEIR, appropriately summarizes the entire history of groundwater analyses of the IVGB. The text lists 1,275 ac-ft/yr as the lower end of the full range of estimates provided, and also discusses how the applicant's report used a value of 6,200 ac-ft/yr. The analysis evaluated the parameters that went into each estimate, and concluded that a value ranging from 5,223 to 6,538 ac-ft/yr was appropriate. Based on this value of recharge, there is no potential for basin-wide overdraft.

The comment's discussion of local drawdown effects is accurate. These effects were calculated and reported in the DEIS/DEIR, using conservative assumptions, and the effect on other groundwater users was estimated. This effect, which would be temporary and result in less than 4 feet of drawdown in the most conservative scenario, would not be a significant impact on the local groundwater users. Again, the commenter offers no evidence for the statement that faults or confining layers could amplify the effect. This same generic statement could be made about any proposed groundwater use in a developed area.

The comment's suggestion to analyze the project's impacts under the lowest recharge scenario is not necessary given that the DEIS/DEIR discusses the incorrect assumptions that went into those lowest recharge estimates. The DEIS/DEIR discusses the full range of estimates from past documents for the sake of completeness, but provides a specific discussion of the deficiencies in the lower estimates. Therefore, a discussion of impacts based on the lower estimates is not reasonable.

- 66-30. The DEIS/DEIR appropriately discusses all available information on potential impacts of CdTe, including the hazards of the components involved, and the potential for the release of, or exposure to, those components. The evidence from the literature is overwhelming in documenting that the potential for release or exposure to CdTe due to normal use, breakage, or even fire is *de minimis*. While the comment generically describes how

breakage could lead to release, it ignores the specific studies, discussed in the DEIS/DEIR, which show that no such release could occur.

The discussion of the results of the “recent study” is based on the Sinha and others (2012) article that was evaluated and discussed in the DEIS/DEIR (see Pages 4.11-6 to 4.11-7). The comment describes some specific numbers used in the article, but fails to reference the clearly stated assumptions and conclusions of the article. The study was based on very conservative assumptions, and still concluded that use of CdTe was unlikely to pose a potential health risk to workers or residents.

The elements of the applicant’s Module Collection and Recycling Program that are relevant to an analysis of site-specific impacts were disclosed in the DEIS/DEIR. The relevant information is that all broken, damaged, panels otherwise at the end of their useful life would be removed from the project area to be recycled at the applicant’s manufacturing facility in Ohio. Based on that information, a conclusion that the project would not affect health and safety of workers, visitors to the site, or other members of the public is reasonable.

66-31. The specific discussion of the CDCA Plan Energy Production and Utility Corridors Element criteria has been added to Section 1.4.1.2 of the PA/FEIS/FEIR. The analysis of various action and no project alternatives specifically developed to avoid impacts to sensitive resources is discussed throughout the DEIS/DEIR. The discussion of the project’s consistency with wilderness areas, wilderness study areas, and lands with wilderness characteristics is discussed through Sections 3.15 and 4.16 of the DEIS/DEIR.

66-32. The comment’s suggestion to analyze the project’s impacts under the lowest recharge values is not necessary given that the DEIS/DEIR discusses the incorrect assumptions that went into those lowest recharge values. The DEIS/DEIR discusses the full range of estimates from past documents for the sake of completeness, but provides a specific discussion of the deficiencies in the lower estimates. Therefore, a discussion of impacts based on the lower estimates is not reasonable.

66-33. The characteristics of the potential translocation sites that are relevant to the suitability of the sites to support tortoise translocation are discussed in the applicant’s Desert Tortoise Translocation Plan, which is attached to the PA/FEIS/FEIR, and is summarized in Section 3.22.1 of the DEIS/DEIR. Section 4.22.3.1 of the DEIS/DEIR discussed the criteria that would be used to select the final translocation site(s), and describes how that final selection would rely on the results of additional connectivity studies.

Section 3.17.1.1 of the DEIS/DEIR discusses the rarity ranking of the vegetative communities present, and concludes that none of the communities are considered imperiled. Therefore, no mitigation for impacts to these communities is required.

The commenter has misinterpreted Figure 6 of the applicant’s Biological Resources Technical Report as implying that the only area surveyed in the Fall of 2008 was the northwest corner of the Project Study Area, which is outside of the footprints of the evaluated alternatives. As discussed in Section 1.0 of the DEIS/DEIR, the original study area in 2008 comprised 6,400 acres, and that entire study area was surveyed for biological resources at that time. Later, the size of the Project Study Area was reduced to 5,850 acres to focus on areas with lower potential resource impacts. The subsequent

surveys were conducted on the smaller area. Overall, the applicant conducted repeated phases of surveys from 2008 through 2012, including fall surveys. Mitigation measure MM-Veg-3 requires pre-construction surveys during appropriate blooming periods, and avoidance of identified special status plants identified during those surveys.

Section 3.17.1.3 of the DEIS/DEIR specifically discusses the number of individuals and occurrences identified for each of the special status plants.

The acreages and numbers of special status plant individuals and occurrences reported in Table 4.17-1 for each alternative is inclusive of the solar array footprint, gen-tie corridor, water pipeline route, and re-routed roads associated with each alternative.

The coincidence of project facilities with occurrences of special status plant species is not based on the BRTR's reference to sections, but on the actual point distributions shown on Figure 3.17-2 of the DEIS/DEIR. Therefore, the assessment of the impact of the project alternatives on identified occurrences is accurate. As discussed above, the commenter has misinterpreted Figure 6 of the BRTR to assume that the September 2008 surveys did not cover the entire Project Study Area. They did, so the statement that the entire project area was not surveyed for the nine-awned pappus grass during its blooming period is not accurate. Section 3.17.1.3 discusses the geographic location of both the viviparous foxtail cactus and the nine-awned pappus grass. Both were discussed as occurring in the upper elevations of the Project Study Area, and outside of the project footprints.

66-34. The comment that several golden eagle territories and nest sites are located within 5 miles of the project area is not an accurate depiction of the potential impact of the project. The relevant issue is not how many territories are within 5 miles, but whether the project site overlaps with a territory. As discussed in Section 3.22.1, the project site partially overlaps one territory. Section 4.22.3.1 quantifies the acreage of foraging habitat that would be removed from this territory to be about 2,000 acres.

66-35. The 2011 Revised Recovery Plan discusses the results of Murphy and others (2007) and other authors in determining whether the genetic results are appropriate to use in delineating revised recovery units. The Plan concludes that there is a generally continuous variation in genetic structure across the range, and did not recognize any significant genetic variation associated with the Northeastern Recovery Unit.

The Regional Assessment was used in the DEIS/DEIR as a source of information regarding connectivity, and also for a description of the current condition of the Ivanpah Watershed as tortoise habitat. However, the DEIS/DEIR did not use the habitat condition calculations of the Regional Assessment to reach conclusions about the effect of the project. The text of the Regional Assessment specifically addressed the reason why the modeling algorithm generated a higher acreage rather than a lower acreage for the project development scenarios in Tables 11 and 12. The DEIS/DEIR did not present, and did not use those values, to generate any conclusions regarding impacts to tortoise habitat. The DEIS/DEIR also did not use the results of the calculations for the east side of Interstate 15 for any purpose.

The text of the PA/FEIS/FEIR has been revised to clarify the statement about the acreage of habitat loss being 1.3 percent of the suitable tortoise habitat in the California portion of Ivanpah Valley. The corrected text refers instead to the Ivanpah Lake watershed, as

analyzed in the Regional Assessment.

It is correct that the different documents use different definitions to define what constitutes tortoise habitat. The USFWS used certain standards in deciding the acreage to include within critical habitat units, BLM used other standards to decide which acreage to include in DWMAs, and various other authors have used different standards in their articles in the literature. Even within the Regional Assessment, habitat potential as defined in the USGS model is not the same as habitat condition defined by the landscape condition model. However, it is the responsibility of the DEIS/DEIR authors to identify and disclose all analyses, even if this results in comparing non-comparable datasets and generating only approximate impact quantities. The fact that the impact quantities reported in the DEIS/DEIR are approximate does not make them, or the conclusions reached by them, inaccurate.

The DEIS/DEIR reports that the project would have direct impacts to approximately 6 percent of potential habitat in the western lobe of Ivanpah Valley. As specified on Page 4.22-12 of the DEIS/DEIR, this is based on the estimate of 33,360 acres of potential habitat as identified by Nussear (2009) and about 2,000 acres for the project footprint. The commenter believes the reported 6 percent is too low, but provides no basis for this statement.

- 66-36. Table 3 and Figure 5 of the applicant's Biological Technical Resources Report document the area and date of the applicant's tortoise surveys in Stateline Pass. As mentioned in the comment, the DEIS/DEIR discussion of the viability of Stateline Pass is not simply based on the statement in the BRTR, but is based on all available information, including the Regional Assessment.
- 66-37. The details regarding the applicant's burrowing owl surveys, which were conducted in accordance with CDFG 2012 Staff Report, are provided in the Bird and Bat Conservation Strategy, available on the project website and included as an additional file on the electronic version of the Final PA/EIS/EIR. Section 4.22.3.1 of the PA/FEIS/FEIR has been revised to provide more details regarding the surveys, as well as applicant-proposed mitigation measures, including pre-construction surveys for burrowing owls.
- 66-38. Section 4.22.3.1 and the corresponding sections for other alternatives in the PA/FEIS/FEIR have been revised to discuss the impacts of the various alternative configurations on bighorn sheep access to Metamorphic Hill.
- 66-39. As discussed in DEIS/DEIR Section 3.19.1.1, the USACE made a determination that the ephemeral washes on the project site are not Waters of the United States. The letter providing that determination has been attached to the PA/FEIS/FEIR as an appendix. The conclusion from the Ivanpah SEGS EIS that that project would affect Ivanpah Dry Lake is not applicable to the Stateline project.
- 66-40. All of the required plans have been developed. The text of the mitigation measures which referred to development of the plans has been revised in the PA/FEIS/FEIR to reflect that the plans have been completed. The plans are attached as appendices to the PA/FEIS/FEIR.
- 66-41. The time table to provide compensatory mitigation has been clarified in the PA/FEIS/FEIR and requires the Applicant to satisfy the compensation requirements no

more than 18 months after the start of project ground-disturbing activities.

The mechanisms and conditions to be applied to future compensatory lands will be in accordance with the requirements of the CDCA Plan and FLPMA for the BLM portion of the compensation, and in accordance with the SB34 Advance Mitigation Land Acquisition Grants Program for the CDFW portion. Both of these legal mechanisms allow for payment of in-lieu fees as a means to comply with compensatory mitigation requirements.

- 66-42. The Raven Management Plan is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR.
- 66-43. The applicant's translocation plan has been reviewed by USFWS, and the translocation will be done in accordance with measures specified by USFWS in the Biological Opinion.
- 66-44. The Bird and Bat Conservation Strategy is available on the project website and is included as an additional file on the electronic version of the Final PA/EIS/EIR. Additional baseline data, impacts analysis, and applicant-proposed mitigation measures, based on the Bird and Bat Conservation Strategy, has been added to Section 4.22.3.1 of the PA/FEIS/FEIR. The measures include implementation of a Bird Monitoring and Avoidance Plan, which will require monitoring and mortality studies, including the potential for bird mortality due to collisions with solar panels.
- 66-45. Mitigation measure MM-Veg-3 in the DEIS/DEIR (Special-Status Plant Avoidance and Restoration) has been specifically developed to avoid, minimize, and mitigate impacts to special status plants. In addition, quantification of impacts to special status plants was considered in the analysis of the different alternative project footprints in the DEIS/DEIR (see Table 4.17-1).
- 66-46. The reference to project emissions under the heading of special-status plants is unusual, and it appears that the comment is actually referring to air emissions. With respect to air emissions, the DEIS/DEIR included detailed mitigation measures to reduce emissions during both construction and operations. The comment does not specify where these mitigation measures are lacking, and does not provide any suggestions for other measures that should be considered.
- 66-47. See response to Common Comment Response Number 1.
- 66-48. BLM agrees that siting of the project outside of the Ivanpah Valley Groundwater Basin (IVGB) would result in no drawdown or impacts within the IVGB. However, as mentioned in the comment, siting of the project in those areas would not meet the purpose and need for the project. Also, although the DEIS/DEIR acknowledged that groundwater use in the IVGB would occur within a limited area, that configuration was analyzed appropriately in the document, and the impacts to both basin-wide overdraft and local groundwater users were found to be less than significant.
- 66-49. The DEIS/DEIR provided a comprehensive analysis of potential hazards associated with CdTe panels, and found no potential for adverse impacts associated with the use of these panels. Based on this conclusion, analysis of alternative panel types, which BLM has no authority to direct the applicant to use, provides no beneficial information to the

environmental analysis.

- 66-50. The location cited in the comment, to the north and west of the golf course, does have fewer tortoises than other locations within the Project Study Area, according to Figure 12 in the BRTR. However, the comment's implication that this is due to proximity to the golf course is not necessarily accurate. In fact, the list of anthropogenic threats to tortoises associated with roads (mineral exploration, illegals dumping of garbage and toxic wastes, release of ill tortoises, vandalism, harassment of tortoises, illegal collection of tortoises, and anthropogenic fire) would appear to have no reason to be associated with the golf course.

Siting of the proposed project and alternatives was done by considering impacts to numerous different resources, not just tortoises, and also with consideration of technical feasibility. As discussed in Sections 2.1.3.1 and 3.19.1.1 of the DEIS/DEIR, Metamorphic Hill diverts stormwater to the south in the North Wash and South Wash, and the proposed project and alternatives were sited to avoid placement of structures in this area of concentrated stormwater flow. In fact, a better explanation for the paucity of tortoises in this area could be related to the fact that this is an area of frequent and concentrated stormwater flow. In any case, the applicant reviewed this area, conducted hydrologic analysis, and concluded that placement of a solar facility in this area was not feasible.

The statement in the DEIS/DEIR about development of Alternative 3 to "avoid" impacts has been changed to more accurately refer to "reducing" impacts. Even then, a simple comparison of the numbers of tortoises and special status plants within the footprints is not sufficient to choose between alternatives. As discussed in Sections 2.7 and 4.22.5.1 of the DEIS/DEIR, the rationale for identification of Alternative 3 as BLM's preferred alternative and the County's Environmentally Superior Alternative is based on the fact that Alternative 3 has the fewest impacts to tortoise connectivity.

- 66-51. The quoted text discussing how cumulative impacts to special status plants would be determined has been revised in the PA/FEIS/FEIR to remove the reference to compensation requirements, and to clarify the statement regarding limitation in distribution or population size. BLM agrees that the distribution and population of these species is already limited, so this criterion cannot be a determining factor for impacts. The text has also been revised to remove the statement that the geographic scope includes the range of each sensitive plant species.

The comment that the project would have a substantial contribution to cumulatively considerable impacts to special status plant species is not supported by any data. Contrary to the commenter's statements, the CNDDDB maps provided by the commenter show that the project would impact few or none of the numerous occurrences of these species in the local area. The analyses in Section 4.17.10.4 demonstrate the very small numbers of occurrences/individuals that may be impacted within the Ivanpah Valley area. In addition, the development of the project configurations and mitigation measures associated with each of the projects, including Ivanpah SEGS and Stateline, have included extraordinary efforts to minimize impacts to special status plants.

- 66-52. The USFWS EA referenced in the comment does not pertain to an analysis of cumulative

effects under NEPA. It pertains to the manner in which USFWS will issue take permits. This information will be considered by USFWS is determining whether a take permit is necessary for the proposed action. Also, with respect to the reference to a 140 mile criterion, the text of the EA actually reads “However, we believe it will be too burdensome to ask the proponent to provide data on that large a scale. We have found, in implementing the resource recovery permit for take of inactive golden eagle nests, that data within a 10-mile radius of the nest provides us with adequate information to evaluate many of the factors noted above.” The cumulative analysis in the DEIS/DEIR is much more extensive than the USFWS-recommended 10-mile radius.

- 66-53. Section 4.17.10.5 of the PA/FEIS/FEIR has been revised to correct the inaccurate comparison of cumulative acreage of jurisdictional drainages to the total acreage of alluvial fan habitat.
- 66-54. Information on the contribution of CdTe panels to cumulative impacts associated with hazardous materials has been added to Section 4.11.10.4. Because the direct impact analysis of CdTe panels indicated there was a low potential for release directly at the project site, the potential for such releases to combine with releases from other projects miles away is even lower.

Letter 67 – Responses to Comments from Tom Driggs, on behalf of the Primmadonna Company

- 67-1. The correction to Comment Letter 65 is noted.

Letter 69 – Response to Comments from Joe Golden

- 69-1. The quality of the tortoise habitat at the proposed project area was evaluated, and discussed in Section 3.22 of the DEIS/DEIR. While the document acknowledges that the site supports tortoise habitat, it also discussed how the project area was considered for protective status (critical habitat and Desert Wildlife Management Area) in the past, and that protective status was not conferred.
- 69-2. The potential for siting the solar project on the Dry Lake bed was evaluated in Section 2.8.1.2 of the DEIS/DEIR. That section provided a variety of reasons, including frequent flooding and the need to place an enormous amount of fill material, for why the proposal would not be feasible.

Letter 70 – Responses to Comments from California Department of Fish and Wildlife (CDFW)

- 70-1. The text in the mitigation measures that referred to future development of the plans has been revised in the PA/FEIS/FEIR, since the plans have been developed.
- 70-2. The Biological Technical Resources Report and Vegetation Management Plan, and other plans were provided on request, and are posted on the project website at http://www.blm.gov/ca/st/en/fo/needles/stateline_solar_farm.html. The plans are also

included as attachments to the PA/FEIS/FEIR.

- 70-3. The Translocation Plan was provided on request, and is posted on the project website at http://www.blm.gov/ca/st/en/fo/needles/stateline_solar_farm.html. The plan is also included as an attachment to the PA/FEIS/FEIR. The plan includes the maps of the potential recipient sites.
- 70-4. Separate figures showing the site plan for Alternative 4 have been added to the PA/FEIS/FEIR.
- 70-5. A description of the activities that would take place in the vegetation transplant sites has been added to Section 2.1.3.1 of the PA/FEIS/FEIR. A description of the impacts of those activities has been incorporated, where appropriate, into Section 4.
- 70-6. The requirement for a CDFG Incidental Take Permit was discussed in the DEIS/DEIR in Section 1.3.4, Table 1-2, Section 3.17.2.2, Section 3.22.2.2, Section 4.22.11.1, Section 4.22.11.3, and Section 5.1.2.
- 70-7. Unlike the CDCA Plan's requirement for compensatory mitigation for desert tortoise, the Plan has no provision allowing BLM to require compensatory mitigation for vegetative communities.
- 70-8. The comments on the Applicant's management plans have been provided to the Applicant, and those plans are being revised accordingly. The revised information has been incorporated into a revision of the project description in Chapter 2 of the PA/FEIS/FEIR. To the extent that the changes resulted in modification of impact conclusions, those changes were made in the appropriate subsections of the PA/FEIS/FEIR.

Letter 73 – Response to Comments from State Clearinghouse

- 73-1. The comments describe the regulatory process to be followed, and do not provide comments directly on the DEIS/DEIR.

Letter 74 – Response to Comments from DoD Siting Clearinghouse

- 74-1. The comment that the project would have a minimal impact on military operations and training is noted. BLM will continue to coordinate should the project move forward.

Letter 75 – Responses to Comments from Mark Silverstein, on behalf of the Clark County Department of Aviation

- 75-1. The conclusion that the project would not conflict with the Southern Nevada Supplemental Airport is noted.
- 75-2. The text of the PA/FEIS/FEIR, Section 3.16, has been revised to correctly refer only to the Southern Nevada Supplemental Airport. The rationale for suspension of the EIS has been revised, as requested in the comment.
- 75-3. The distinction between fuels and hazardous materials, as stated in the comment, is noted.

The text of Section 4.19.10.4 of the PA/FEIS/FEIR has been revised accordingly.

- 75-4. Figure 4.1-1 has been revised in the PA/FEIS/FEIR, as requested in the comment.

Letter 76 – Responses to Comments from Stephanie Dubois, on behalf of the Mojave National Preserve

- 76-1. The impacts to desert tortoise, including cumulative impacts mentioned in the comment, were identified and disclosed in Section 4.22.3.1 of the DEIS/DEIR. The specific compensation requirements have not been completed, and the comment regarding potential land acquisition in Lanfair Valley and the Preserve are noted. Long-term monitoring and studies are described as part of the applicant's Translocation Plan in Section 2.1.3.5 of the DEIS/DEIR, and will be required as part of any ROW grant.

The proposal to remove the security and tortoise exclusion fencing post-construction was considered by the agency, but is not a feasible option to consider. Security fencing is required to protect the Applicant's assets, and to protect against intentionally destructive acts. Tortoise fencing is required to avoid any potential for vehicle strikes to tortoise during operations.

- 76-2. The impacts to bighorn sheep, including potential effects on migration, were discussed in the DEIS/DEIR in Section 4.22.3.1.
- 76-3. The effect of the project on open routes was discussed in Section 4.12.3.1 of the DEIS/DEIR, and a mitigation measure (MM-Rec-1) was included to ensure that open routes are redirected around the project perimeter.
- 76-4. Section 4.19.3.1 of the DEIS/DEIR evaluated the availability of groundwater in the project area to support construction, and concluded that adequate water is available. Gravel road surfaces are proposed in some project areas (see DEIS/DEIR Section 1.2, Section 2.1.3.1, and Section 2.1.3.2.2). While gravel on additional road surfaces could reduce emissions even further, the vast majority of emissions are associated not with roads, but with the solar array areas.
- 76-5. The DEIS/DEIR analyzed noise impacts on wildlife in Section 4.22.3.1. A specific subsection on wildlife avoidance due to human presence, noise, and light was developed, and begins on page 4.22-3 of the DEIS/DEIR.
- 76-6. Section 4.7.3.1 addressed the potential for the removal of the acreage from the grazing allotment to affect the ability of the remainder of the allotment to serve for wildlife habitat, recreational use, or other uses. The principal driver in the location of cattle on the allotment is not space, since the acreage is so large. The principal driver is the availability of water. Since the proposed project site contains no water, removal of that acreage of the allotment would not likely affect movement of the cattle.
- 76-7. It is correct that the West Yost reports state that groundwater removal in the southern part of Ivanpah Valley will ultimately reduce natural outflows to Las Vegas Valley. This value was quantified in the March 2011 report, but was modified in the September 2011 report to add relevant information about the timeframe involved. By definition, any consumptive use of groundwater in any location must reduce the outflow from the basin.

If this standard were used to determine whether to issue groundwater permits, then groundwater withdrawals would never be approved in any basin.

The September 2011 West Yost report discusses how the time period required for this equilibration is on the order of many centuries. Therefore, the reduction in underflow centuries in the future due to a temporary use of water withdrawal is not significant. Also, the commenter fails to recognize how the water quality changes between the project site and the point of outflow. Water quality near the project site is potable, as fresh water precipitation recharges the aquifer on the alluvial fan. As the groundwater reaches the Dry Lake bed, evaporation results in the concentration of salts. Water quality in the middle of the Dry Lake, where the outflows occur, is highly concentrated in salts. Therefore, although outflow would be reduced slightly in the distant future, the water quality of that outflow would not be useable for any purpose.

- 76-8. The analysis of recharge rates, beginning on Page 4.19-3 of the DEIS/DEIR, appropriately summarizes the entire history of groundwater analyses of the IVGB. The text lists 1,275 ac-ft/yr as the lower end of the full range of estimates provided, and also discusses how the applicant's report used a value of 6,200 ac-ft/yr. The analysis evaluated the parameters that went into each estimate, and concluded that a value ranging from 5,223 to 6,538 ac-ft/yr was appropriate. The analysis presented in the DEIS/DEIR is not based on a blind acceptance of the West Yost estimate, nor does it ignore the source of the estimates at the lower end of the range.

The direction to a more recent version of the ENSR report is appreciated.

- 76-9. The visual impact of the facility on viewers in the adjacent special-designation areas, including the Mojave National Preserve, was evaluated in Section 4.18.3.1, and the cumulative visual analysis was provided in Section 4.18.10. Those analyses concluded that the proposed facility would contribute to a cumulative visual impact that would be significant.
- 76-10. As discussed in Section 3.18.1.2, BLM's Visual Resource Inventory of the project area was done in accordance with the specific criteria in BLM Handbook H-8410-1, Visual Resource Inventory. Table 3.18-2 indicates that the visibility of the project from the Preserve was considered in the analysis, and resulted in a High rating for sensitivity level. However, the overall rating, which is also based on scenic quality rating and distance zone, still classifies as VRI Class III.
- 76-11. The commenter's preference for Alternatives 5 or 6 is noted.
- 76-12. BLM has added a mitigation requirement, MM-REC-2, which requires the Applicant to develop and install interpretive features to be located at the western Ivanpah Dry Lake Recreation Area. The specific requirements of the interpretive features include a discussion of Arrowhead Trail history, and Ivanpah Valley natural landmarks and ecological interpretation.